School Capital Policies, Regulations and Guidelines

Finance and Administration
Division

Alberta

INTRODUCTION

Background

This document is a compendium of the policies, regulations and guidelines that govern provincial school capital funding in Alberta. This compendium supplements the general framework of policies, guidelines and procedures contained in the Management and Finance Plan (MFP), Program Policy Manual, Third Edition, School Building Funding Programs (Pages 5 - 14).

All relevant documents, which were previously issued under separate covers, are made available in one publication. It is hoped that those involved in applying for provincial funding of new school construction (additions), the Building Quality Restoration Program (BQRP), and school modernization projects will find this compendium helpful.

Scope

Each section of this compendium contains a set of policies, regulations, or guidelines, as they were previously issued. However, several additions have been made to integrate the information contained in these separate documents, and to provide a comprehensive user guide. These additions are:

1. a table of contents for the entire compendium,
2. cross-reference guides to each of the three major programs -- new construction, modernization and BQRP, and
3. an alphabetical index to the contents.

Also, a new detailed administrative procedures section is provided to clarify the application and approval processes.

Revisions

Revisions will be provided as updates to the individual sections, until such time as a revision of the whole document is warranted.

Contact

Inquiries regarding the school capital policies, regulations and guidelines contained herein, should be directed to:

School Buildings Services Branch
Alberta Education
11160 - Jasper Avenue
EDMONTON, Alberta
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TABLE OF CONTENTS

SECTION PAGE

Introduction and Contents

Introduction i
Table of Contents ii
Guide to New Construction Program viii
Guide to Modernization Program xiv
Guide to Building Quality Restoration Program xvii

Administrative Procedures

Part 1: Detailed Administrative Procedures for New School Construction and Modernization Applications and Approvals 1

Part 2: Detailed Administrative Procedures for the Building Quality Restoration Program (BQRP) 6

School Buildings Regulation, 1984

Appendix -- School Buildings Act
School Buildings Regulation 1984 1

Definitions

Instructional Area 1
Operational Capacity 1
School Board 1
School Buildings Project 1
Total Capacity 1
Fixed Capacity 2

Schedule 1 - Application Forms

Form A - Application Form for New Construction 4
Form B - School Modernization Application Form 5
Form C - BQRP Application Form 7

Schedule 2 - Fixed Capacity and Areas 9

SECTION PAGE

School Capital Funding Order

Definitions for Calculation of School Construction Project Funding

3a Area (A) 1
b Equity (E) 1
c Total Capacity 1
d Instructional Area 1
e Operational Capacity 1
f Provincial Support (P) 1
g Provincial Average Equalized Assessment Per Pupil 2
h Support Per Square Metre (S) 2
i School Building Project 2
j Utilization Ratio (u) 2
k Utilization Factor (U) 3
l Depreciation Ratio (D) 3

4a Total Capacity 3
b Operational Capacity 3
c Exclusions for Total Capacity 3
d School Space Leased to a Private School 3

5a Formula for school building project 4
b Formula for school building project involving special education 4
c Formula for replacement of an existing school building 4

6a Formula for regular modernization 4
b Formula for modernization carried out instead of new construction 4
c Formula for modernization of a small area for a compulsory program implemented by Department of Education 4
d Maximum Provincial Financial Support 4

7a Regular BQRP Formula 5
b Business Education Equipment Component 5

8 Vocational Education Equipment 5

Schedule A Maximum Support of Construction Scheme Approved by the Minister From January 1, 1984 to December 31, 1984 . . . 6

Schedule B Maximum Support of Construction Scheme Approved by the Minister From January 1, 1985 to June 30, 1985 9

SECTION PAGE

Tendering Regulation

Definitions 1
Procurement shall be by public tender 1
.....unless another scheme is approved 1
Withdrawal of Tenders 2
Approval of Tenders 2
Modified Tendering Procedures 3
Tendering Procedures 3
Requirements in a Contract 5
Requirements with a Contract 5
Limitations to Management and Proposal Schemes 6

Facility Area Guidelines

School Buildings Facilities Instructional and Non-instructional Area Guidelines

School Categories 1

Instructional Areas 2

Non-Instructional Areas 7

BQRP Guidelines

Government of the Province of Alberta, Department of Education, Building Quality Restoration Program

Program Statement

Introduction 1
Duration of Program 1
Objectives 2
Guiding Principles 2
Procedure 3
Financing 5
  Approvals 5
  Payments of Outright Grant 6
  Borrowings 7
  Debenture Funding Procedures 7

Categories of Projects 8

  Structural 8

  Mechanical 13

SECTION PAGE

Electrical 17
Code Requirements 18
Business Education Equipment 21
Energy Conservation Measures 22
Other Approved Ministerial Programs 23

Appendix A - Application Form 24
Appendix B - Application Procedures 25
Appendix C - Yearly Summary Sheet 26
Appendix D - Instructions for Completing Yearly Summary Sheet 27
Appendix E - Distance (By Air) Allowances for BQRP Support Prices 28
Appendix F - BQRP - 5 Year Program 1984 -1988 29
Appendix G - Application for BQRP Advances 30

School Capital Plan, 1984 - 1988

1984 - 1988 School Capital Funding Plan

Background 1
Trends in Enrolments and School Construction (1970 - 1983) Figure 1 2
The 1979 - 1983 School Capital Funding Plan 3

Funding Formula 3
Equity Factor (E) 3
Utilization Factor (U) 3
Approved Area Factor (A) 4
Jurisdictional Profile of Capacities, Exemptions and Enrolments (Table 1) 5
Support Factor (S) 6

1984 - 1988 School Capital Funding Plan

Criteria for New Plan 6
Total School Construction Inventory (Figure 2) 7
Funding Formula Adjustments 8
Modernization 8
Priority System 8
The Approval Process 9

1984 - 1988 Building Quality Restoration Program (BQRP) 10

Summary 11

SECTION PAGE

Capacity Exemptions

Establishing the Total and Operational Capacity of All Schools in a Jurisdiction

Exemptions for:

Leases Approved by the Minister 1
Special Education Classrooms 1
English As A Second Language 1
Other Uses 1

Guidelines for Capacity Adjustments for Students Withdrawn From A Jurisdiction 1

School Buildings Services

School Buildings Services Branch

Personnel 1
Purposes 2
An Overview of Responsibilities and Services 2
School Buildings Board 4

Forms

New Construction 1
Modernization 6
Building Quality Restoration Program 12

Interim Policy and Guidelines

Use of Vacant School Space

Policy 1
Guidelines 1
  Public Sector 1
  Non-profit Sector 1
  Private Sector 1

Use of Vacant School Space (Table) 3

Exemption of Space Leased to a Municipal Corporation 4
Guidelines for Constructing Instructional Areas In Community Facilities 5
Information Which may be Requested at the Discretion of the School Buildings Board 6
Disposal and Sale of School Property Guidelines 7

SECTION PAGE

Energy Conservation Guidelines

- Energy Conservation Guidelines for New Schools
  - Introduction
  - Acknowledgments
  - Table of Contents
  - Energy Conserving Design Guidelines for New Schools
    - Objectives and Energy Performance 1
    - Design Suggestions 3
      - Building Envelope 3
      - Heating Systems 4
      - Ventilating Systems 5
      - Mechanical Cooling 5
      - Plumbing 6
      - Electrical Systems 6
- Appendix No. 1 - Energy Use Analysis Input Parameters 8
- Appendix No. 2 - Energy Performance Targets 9
- Appendix No. 3 - Recommended Illuminances 9

Index

CROSS REFERENCE GUIDE TO
SECTIONS ON THE
NEW CONSTRUCTION PROGRAM

CROSS-REFERENCE GUIDE TO SECTIONS ON THE NEW CONSTRUCTION PROGRAM

SECTION PAGE

Administrative Procedures

Part 1: Detailed Administrative Procedures for New School Construction and Modernization Applications and Approvals 1

School Buildings Regulation

Appendix -- School Buildings Act School Buildings Regulation 1984 1

Definitions

Instructional Area 1
Operational Capacity 1
School Board 1
School Buildings Project 1
Total Capacity 1
Fixed Capacity 2

Form A - Application Form for New Construction 4
Schedule 2 - Fixed Capacity and Areas 9

Table 1 - Permanent-Type Construction Senior High 9
Table 2 - Permanent-Type Construction Junior High 10
Table 3 - Permanent-Type Construction Elementary 11
Table 4 - Expandable-Contractible Schools - Core Section Junior High Schools - Senior High Schools 12
Table 5 - Expandable-Contractible Schools - Core Section Elementary Schools 13
Table 6 - Expandable-Contractible Schools - First School in a Utilization Sub-Area Core Section 13
Table 7 - Expandable-Contractible Schools - Portable Sections 14
Table 8 - Self-contained Portable Schools 14

School Capital Funding Order

Definitions for Calculation of School Construction Project Funding 1

SECTION PAGE

3a Area (A) 1
b Equity (E) 1
c Total Capacity 1
d Instructional Area 1
e Operational Capacity 1
f Provincial Support (P) 1
g Provincial Average Equalized Assessment Per Pupil 2
h Support Per Square Metre (S) 2
i School Building Project 2
j Utilization Ratio (u) 2
k Utilization Factor (U) 3
l Depreciation Ratio (D) 3
4a Total Capacity 3
b Operational Capacity 3
c Exclusions for Total Capacity 3
d School Space Leased to a Private School 3
5a Formula for school building project 4
b Formula for school building project involving special education . . 4
c Formula for replacement of an existing school building 4
6a Formula for regular modernization 4
b Formula for modernization carried out instead of new construction 4
c Formula for modernization of a small area for a compulsory program implemented by Department of Education 4
d Maximum Provincial Financial Support 4
Schedule A Maximum Support of Construction Scheme Approved by the Minister From January 1, 1984 to December 31, 1984 6

Table 1 - Basic Construction 6
Table 2 - Increase In Support Per Square Metre as a Result of Location and Distance 6
Table 3 - Increase In Support Per Square Metre as a Result of Lack of Community Water or Sewage System 7
Table 4 - Adjustment for New School Building Construction Projects Where Actual Cost is Less than Financial Support 7
Table 5 - Support for an Access Firelane Required as a Result of Lack of a Public Street Acceptable as an Access Route for Fire Department Equipment 8
Table 6 - Support for Equipment Required for a Vocational Shop that is Included in a School Building Project 8
Table 7 - Support for the Cost of Moving, Resetting and Reconnecting an Existing Portable Classroom, Portable Section or Self-Contained Portable School From One School District 8
Table 8 - Support for the Cost of Repairing a Portable Classroom, Portable Section or Self-Contained Portable School Under Table 7 if it is Obtained From Another School Division 8

SECTION PAGE

Table 9 - Support for the Cost of Demolition of All or Part of an Existing Building Over Which New Construction Must be Carried Out Where in the Opinion of the Board, the Demolition is Unavoidable 8
Table 10 - Support for the Cost of Overcoming an Unavoidable and Essential Building Restriction or Site Problem 8
Table 11 - Support for an Approved Clerk of the Works Employed by the School Jurisdiction for the Purpose of Monitoring the Construction of a Permanent School Building or Addition of 750 Square Metres or Greater or for a Modernization Where Government Support Exceeds $500,000. 8

Schedule B Maximum Support of Construction Scheme Approved by the Minister From January 1, 1985 to June 30, 1985

Table 1 - Basic Construction 9
Table 2 - Increase in Support per Square Metre as a Result of Location and Distance 9
Table 3 - Increase in Support per Square Metre as a Result of Lack of Community Water or Sewage System 10
Table 4 - Adjustment for New School Building Construction Projects Where Actual Cost is Less than Financial Support 10
Table 5 - Support for an Access Firelane Required as a Result of Lack of a Public Street Acceptable as an Access Route for Fire Department Equipment 11
Table 6 - Support for Equipment Required for a Vocational Shop That is Included in a School Building Project 11
Table 7 - Support for the Cost of Moving, Resetting and Reconnecting an Existing Portable Classroom, Portable Section or Self-Contained Portable School From one School District 11
Table 8 - Support for the Cost of Repairing a Portable Classroom, Portable Section or Self-Contained Portable School Under Table 7 if it is Obtained From Another School Division 11
Table 9 - Support for the Cost of Demolition of All or Part of an Existing Building Over Which New Construction Must Be Carried Out Where in the Opinion of the Board, the Demolition is Unavoidable 11
Table 10 - Support for the Cost of Overcoming an Unavoidable and Essential Building Restriction or Site Problem 11

SECTION PAGE

Table 11 - Support for an Approved Clerk of the Works Employed by the School Jurisdiction for the Purpose of Monitoring the Construction of a Permanent School Building or Addition of over 750 Square Metres or for a Modernization where Government Support Exceeds $500,000 or for a Group of New Construction and Modernization Projects where the Combined Total Government Support Exceeds $500,000 11

Tendering Regulation

Definitions 1
Procurement shall be by public tender 1
.....unless another scheme is approved 1
Withdrawal of Tenders 2
Approval of Tenders 2
Modified Tendering Procedures 3
Tendering Procedures 3
Requirements in a Contract 5
Requirements with a Contract 5
Limitations to Management and Proposal Schemes 6

Facility Area Guidelines

School Building Facilities Instructional and
Non-instructional Area Guidelines

School Categories 1
    Category A 1
    Category B 1
    Category C 1
    Category D 1
    Others 1
Instructional Areas 2
    Classrooms 2
    Science Experience Classrooms 2
    Ancillary Classrooms 2
    Physical Education 3
    Library 4
    Cafeteria/Ancillary 5
    Home Economics 5
    Industrial Arts 5
    Industrial Education 10-20-30 and 12 5
    Vocational 6

SECTION PAGE

Non-Instructional Areas 7
    Administrative Areas 7
    Staff Areas 8
    Physical Education - Non-instructional Areas 8
    Infirmary 9

School Capital Plan

1984 - 1988 School Capital Funding Plan

Background 1
Trends in Enrolments and School Construction
  (1970 - 1983) Figure 1 2
The 1979 - 1983 School Capital Funding Plan 3
    Funding Formula 3
    Equity Factor (E) 3
    Utilization Factor (U) 3
    Approved Area Factor (A) 4
    Jurisdictional Profile of Capacities,
      Exemptions and Enrolments (Table 1) 5
    Support Factor (S) 6

1984 - 1988 School Capital Funding Plan

    Criteria for New Plan 6
    Total School Construction Inventory (Figure 2) 7
    Funding Formula Adjustments 8
    Modernization 8
    Priority System 8
    The Approval Process 9

Capacity Exemptions

Establishing the Total and Operational Capacity of All Schools in a Jurisdiction

Exemptions for:

        Leases Approved by the Minister 1
        Special Education Classrooms 1
        English As A Second Language 1
        Other Uses 1
    Guidelines for Capacity Adjustments for Students
      Withdrawn From A Jurisdiction 1

SECTION **PAGE**

Forms

Application Form for New Construction 1
Summary of Projects on Form 1315-236 A & B 2
Statement of Final Costs 3
Statement of Eligible Costs 4
Final Statement of Eligible Costs 5

Interim Policy and Guidelines

Guidelines for Constructing Instructional Areas In Community Facilities 5

Energy Conservation Guidelines

Energy Conservation Guidelines for New Schools
- Introduction
- Acknowledgments
- Table of Contents
- Energy Conserving Design Guidelines for New Schools
  - Objectives and Energy Performance 1
  - Design Suggestions 3
    - Building Envelope 3
    - Heating Systems 4
    - Ventilating Systems 5
    - Mechanical Cooling 5
    - Plumbing 6
    - Electrical Systems 6
- Appendix No. 1 - Energy Use Analysis Input Parameters 8
- Appendix No. 2 - Energy Performance Targets 9
- Appendix No. 3 - Recommended Illuminances 9

CROSS REFERENCE GUIDE TO

SECTIONS ON THE

MODERNIZATION PROGRAM

CROSS-REFERENCE GUIDE TO SECTIONS ON THE MODERNIZATION PROGRAM

SECTION PAGE

Administrative Procedures

Part 1: Detailed Administrative Procedures for New School Construction and Modernization Applications and Approvals 1

School Buildings Regulation

Appendix -- School Buildings Act

Definitions

Instructional Area 1
Operational Capacity 1
School Board 1
School Buildings Project 1
Total Capacity 1
Fixed Capacity 2

Form B - School Modernization Application Form 5

School Capital Funding Order

Definitions for Calculation of School Construction Project Funding 1

3a Area (A) 1
b Equity (E) 1
c Total Capacity 1
d Instructional Area 1
e Operational Capacity 1
f Provincial Support (P) 1
g Provincial Average Equalized Assessment Per Pupil 2
h Support Per Square Metre (S) 2
i School Building Project 2
j Utilization Ratio (u) 2
k Utilization Factor (U) 3
l Depreciation Ratio (D) 3
4b Operational Capacity 3

SECTION

PAGE

5a Formula for school building project 4
b Formula for school building project involving special education . . 4
c Formula for replacement of an existing school building 4
6a Formula for regular modernization 4
b Formula for modernization carried out instead of new construction 4
c Formula for modernization of a small area for a compulsory program implemented by Department of Education 4
d Maximun Provincial Financial Support 4

Tendering Regulation

Definitions 1
Procurement shall be by public tender 1
.....unless another scheme is approved 1
Withdrawal of Tenders 2
Approval of Tenders 2
Modified Tendering Procedures 3
Tendering Procedures 3
Requirements in a Contract 5
Requirements with a Contract 5
Limitations to Management and Proposal Schemes 6

School Capital Plan

1984 - 1988 School Capital Funding Plan

Background 1
Trends in Enrolments and School Construction (1970 - 1983) Figure 1 2
The 1979 - 1983 School Capital Funding Plan 3
  Funding Formula 3
  Equity Factor (E) 3
  Utilization Factor (U) 3
  Approved Area Factor (A) 4
  Jurisdictional Profile of Capacities. Exemptions and Enrolments (Table 1) 5
  Support Factor (S) 6
1984 - 1988 School Capital Funding Plan
  Criteria for New Plan 6
  Total School Construction Inventory (Figure 2) 7
  Funding Formula Adjustments 8
  Modernization 8
  Priority System 8
  The Approval Process 9

SECTION **PAGE**

Capacity Exemptions

Establishing the Total and Operational Capacity of All Schools in a Jurisdiction

Exemptions for:

Leases Approved by the Minister 1
Special Education Classrooms 1
English As A Second Language 1
Other Uses 1

Guidelines for Capacity Adjustments for Students Withdrawn From A Jurisdiction 1

Forms

School Modernization Application Form B . . . . 6&7
Summary of Projects on Form 1315-236 A & B 8
Statement of Final Costs 9
Final Inspection Report Form to be done in Conjunction with Statement of Final Costs 10
Final Statement of Eligible Costs 11

CROSS REFERENCE GUIDE TO
SECTIONS ON THE
BUILDING QUALITY RESTORATION PROGRAM

CROSS-REFERENCE GUIDE TO SECTIONS ON THE BUILDING QUALITY RESTORATION PROGRAM

SECTION **PAGE**

Administrative Procedures

Part 2: Detailed Administrative Procedures for the Building Quality Restoration Program (BQRP) 6

School Buildings Regulation

Form C - BQRP Application Form . . . . 7 & 8

School Capital Funding Order

7a Regular BQRP Formula 5
b Business Education Equipment Component 5
8 Vocational Education Equipment 5

BQRP Guidelines

Government of the Province of Alberta, Department of Education,
Building Quality Restoration Program

Program Statement

- Introduction 1
- Duration of Program 1
- Objectives 2
- Guiding Principles 2
- Procedure 3
- Financing 5
  - Approvals 5
  - Payments of Outright Grant 6
  - Borrowings 7
  - Debenture Funding Procedures 7
- Categories of Projects 8
  - Structural 8

SECTION PAGE

    Roof 8
    Windows and Glass Block 9
    Floor Covering 10
    Major Structural Components 10
    General Interior Upgrading 11
    General Exterior Upgrading 11

Mechanical 13

    Plumbing 13
    On Site Services 13
    Water Supply and/or Sewage Disposal Systems 13
    Heating Systems 14
    Air Circulation Systems 15
    Conversions 16

Electrical 17
Code Requirements 18

    Fire Prevention Branch 18
    Boilers Branch 20
    Gas Protection Branch 20
    Electrical Protection Branch 20
    Plumbing Inspection Branch 20
    Occupational Health and Safety 20
    Alberta Building Standards 21

Business Education Equipment 21

    Elementary and Junior High School Computer Project 21
    Senior High School Business Education Equipment Upgrading 21

Energy Conservation Measures 22
Other Approved Ministerial Programs 23

Appendix A - Application Form 24
Appendix B - Application Procedures 25
Appendix C - Yearly Summary Sheet 26
Appendix D - Instructions for Completing Yearly Summary Sheet 27
Appendix E - Distance (By Air) Allowances for BQRP Support Prices 28
Appendix F - BQRP - 5 Year Program 1984 - 1988 29
Appendix G - Application for BQRP Advances 30

School Capital Plan

1984 - 1988 Building Quality Restoration Program (BQRP)

Criteria for BQRP 10
BQRP Priorities 10
BQRP Funding Formula 10
Control Procedures for BQRP 10

SECTION **PAGE**

Forms

BQRP Application Form . . . . 12&13
Yearly Summary Sheet . . . . 14&15
BQRP Claim Form . . . . 16&17

ADMINISTRATIVE PROCEDURES

ADMINISTRATIVE PROCEDURES

PAGE

Part 1 Detailed Administrative Procedures for New School Construction and Modernization Applications and Approvals

Preliminary Planning 1
Submission of Capital Budget 1
School Buildings Board Approval 1
Commission An Architect 2
Sketch Plans 2
Intent to Proceed 2
Debenture Borrowing By-law 2
Local Authorities Board Approval 2
Borrowing Application 3
Final Plans 3
Tenders 3
Approval of Tender or a Scheme of Construction 3
Construction Contract 4
New Capacity 4
Statement of Final Costs 4
Final Inspection 5
Eligible Costs 5
Approval of Supported Costs 5

Part 2 Detailed Administrative Procedures for the Building Quality Restoration Program (BQRP)

Application 6
Establishment of Provincial Priorities 6
Initial Inspection 6
School Buildings Board Approval 6
BQRP Funding 6
Tender Approval 7
Project Completion 7
Final Inspection 7
Final Payment 7

PART 1

DETAILED ADMINISTRATIVE PROCEDURES FOR NEW SCHOOL CONSTRUCTION AND MODERNIZATION APPLICATIONS AND APPROVALS

1. Preliminary Planning

a. The school board will conduct a facility needs assessment at the jurisdiction level, based on projected enrolments and building conditions.

b. The school board will establish its total and operational capacities for the school capital planning period. (See Capacity Exemptions Section)

c. The school board will prepare and adopt a 3 - 5 year school Capital Plan which incorporates the facility needs assessment.

2. Submission of Capital Budget

a. By March 31 of each year, the school board will submit to School Buildings Services Branch:

i) a 3 - year Capital Plan on a Form A for each new construction project and on a Form B for each modernization project;
ii) a capital projects summary form, for each capital budget year;
iii) a school board resolution; and
iv) an appended facility needs assessment.

b. The School Buildings Services Branch will acknowledge receipt of the Capital Budget application.

3. School Buildings Board Approval

The School Buildings Board will grant funding approval to projects in accordance with Provincial Priorities and fiscal allocations. Approval granted will be "In Principle" or "In Full".

Approval "In Principle" applies to:

a. Modernization projects where a detailed submission, including project plans, are required.

b. New Construction (addition) projects associated with a modernization.

c. Modernization and/or new construction projects, for school jurisdictions where estimated local debt retirement costs exceed three mills. A five-year Financial Plan must be submitted for Ministerial approval, in accordance with Section 6(1) of the Regulation.

Approval In Full:

When the requirements stated in (a) and (c) are fulfilled the project(s) are then approved "In Full." Modernization projects will be given a detailed recognition of need which includes the capacity change, approved supported costs and maximum government support.

"Approval In Full" will be granted to a totally new construction project if it meets all the requirements of the School Buildings Regulation.

4. Commission An Architect

The school board will hire an architect and enter into a formal agreement for complete architectural and engineering services, if not already done.

5. Sketch Plans

The school board may submit project sketch plans for School Buildings Services review of supported areas and capacity rating.

6. Intent To Proceed

The school board will submit a written notice of "Intent to Proceed to School Buildings Services Branch." This should be done only after the project has been approved "In Full". The following relevant information or documents should accompany the letter:

a. final drawings and specifications (or final structural plans) if available
b. copy of any tuition or joint agreements which apply to the project
c. information on title to school site, if applicable
d. other information that pertains to the specific project

7. Debenture Borrowing By-law

The school board will assemble the architect's estimates of construction costs, fees, land acquisition, furniture and equipment, landscaping, services, etc. and proceed to pass a by-law to borrow by way of debenture in accordance with Sections 111 to 123 of the School Act. Indian Affairs and/or other support should be determined prior to the preparation of the Debenture Borrowing By-law.

8. Local Authorities Board Approval

The school board will forward necessary materials and information to the Alberta Local Authorities Board requesting approval of the Debenture Borrowing By-Law.

The school board will also forward one copy of the by-law, along with the Source and Application of Funds Form to Alberta Education, School Business Administration Services Branch.

9. Borrowing Application

The school board will obtain borrowing application forms from the Alberta Municipal Financing Corporation and submit completed applications to School Business Administration Services Branch for processing.

10. Final Plans

a. The school board will submit two sets of final plans and specifications to School Buildings Services to finalize supported areas and capacities. The plans examiner will review and return one set of plans along with a letter indicating the approved area for new construction projects.

b. School boards with local Plans Examination and Inspection Services will submit two sets of plans and specifications to them. The remaining jurisdictions will submit two sets of plans and specifications to Alberta Labour, Buildings Standard Branch, in Edmonton.

11. Tenders

The school board will call for tenders, (or open bid proposals in public at time and place designated).

12. Approval of Tender or a Scheme of Construction

A. Modernization

a. The school board will submit, to School Buildings Services Branch, for Ministerial approval, a tender for each project that exceeds $100,000 in maximum government support. This submission will include:

  i) The original sealed tender, bid bond, consent of surety, etc.
  ii) Copy of board motion of acceptance
  iii) List of bidders
  iv) Acceptable reasons, if the lowest tender was not accepted
  v) Cost breakdown of the tender if both new construction and modernization are involved

b. The school board will submit, to School Buildings Services Branch, for Ministerial approval a scheme of construction for each project that exceeds $100,000 in maximum government support. This will include:

  i) The manner in which it is proposed to provide the materials, supplies and labour
  ii) An estimate of the cost. Separate estimates of cost for new construction and modernization are to be submitted where new construction and modernization are being done together
  iii) The manager or foreman's name and qualifications
  iv) Reasons for selection of the scheme
  v) Any other information that the Minister may request

c. Projects that have $100,000 or less in maximum government support, do not require approval of a tender/scheme of construction. Once approval "In Full" has been received, the board submits its letter of "Intent to Proceed" and Final Plans and Specifications for the project. When completed, a Statement of Final Costs is submitted to School Buildings Services Branch on the appropriate forms.

B. New Construction

a. The school board will submit to School Buildings Services Branch for Ministerial approval a tender for each project. This submission will include:

i) The original sealed tender, bid bond, consent of surety, etc.
ii) Copy of board motion of acceptance
iii) List of bidders
iv) Acceptable reasons, if the lowest tender was not accepted
v) Cost breakdown of the tender if both new construction and modernization are involved

b. The school board will submit to School Buildings Services Branch for Ministerial approval a scheme of construction for each project. This submission will include:

i) The manner in which it is proposed to provide the materials, supplies and labour
ii) An estimate of the cost. Separate estimates of cost for new construction and modernization are to be submitted where new construction and modernization are being done together
iii) The manager or foreman's name and qualifications
iv) Reasons for selection of the scheme
v) Any other information that the Minister may request

13. Construction Contract

After the tender or scheme of construction has been approved, the school board will submit, to School Buildings Services Branch, a copy of the contract or in the case of an alternate scheme of construction, written notification of commencement. A contract that is dated prior to the date of approval of a tender or a scheme of construction is invalid.

14. New Capacity

One year after the date of Ministerial approval of new construction project(s), the School Buildings Board will add the capacity of the project, (if any) to the jurisdiction total. Change in capacity resulting from modernization is made when final plans are approved.

15. Statement of Final Costs

Upon completion of the project, the school board will submit a Statement of Final Costs (on the appropriate forms provided), to School Buildings Services with a copy to School Business Administration Services.

16. Final Inspection

School Buildings Services inspections will be carried out as required, and a final inspection will be made after the Statement of Final Costs is received.

17. Eligible Costs

A Statement of Eligible Costs will be prepared by School Buildings Services and submitted to the School Buildings Board for approval. **(A FINAL Statement of Eligible Costs will be prepared for modernization projects completed.)**

18. Approval of Supported Costs

a. Three years after the tender or scheme approval date, for new construction projects, the Utilization Factor and final support of the project will be confirmed with the school jurisdiction.

b. The School Buildings Board will approve the supported amount and advise the school jurisdiction of the FINAL Statement of Eligible Costs.

c. Installment payment reimbursement on debentures, will be based on the estimated supported portions of the debentures as determined by the School Buildings Board and School Business Administration Services. The final support on the debentures will be determined after the final Statement of Eligible Costs is issued by the School Buildings Board.

PART 2

DETAILED ADMINISTRATIVE PROCEDURES FOR THE BUILDING QUALITY RESTORATION PROGRAM (BQRP)

1. Application

a. The school board will submit to School Buildings Services Branch applications providing details of work for each school on BQRP Application Form C (in order of priority) and a Summary Sheet of all projects to be carried out for that year (in order of priority).

b. Applications must be submitted prior to March 31 each year.

c. Emergency, handicapped facilities, business education and energy projects may be submitted as required and will be considered on an individual basis.

2. Establishment of Provincial Priorities

Applications will be reviewed by the School Buildings Services Branch and prioritized. School boards will be notified regarding projects which meet Provincial priorities and BQRP Guidelines.

3. Initial Inspection

Where necessary, a construction inspector will visit the school site with a representative of the school board. The inspector will make his recommendation to the School Buildings Board.

4. School Buildings Board Approval

a. School Buildings Board will make the decision on each request and will determine the level of support, if the project is approved.

b. A Recognition of Need letter and Statement of Claim Form 1307-85 will be forwarded to the school board.

5. BQRP Funding

a. Financing for BQRP projects will be by outright grants for supported project costs to a maximum of $100,000 for all projects (excluding Business Education equipment upgrading) approved for the program year.

b. When the total estimated supported costs exceed $100,000 in a program year, there will be no outright grant and the total amount must be financed by debenture borrowing.

c. The unsupported costs may be financed by debentures, short-term loans or current operating fund.

d. Business Education equipment upgrading will be funded by an outright grant of 50 percent of the supported amount.

6. Tender Approval

a. The school board will submit a tender for Ministerial Approval, for each project item which exceeds $100,000 in estimated government support. The submission will be sent to the School Buildings Services Branch and will include:

   i) Original sealed tender, Bid Bond, etc.
   ii) List of Bidders
   iii) Board Motion of Acceptance
   iv) Acceptable reason, if lowest tender was not accepted
   v) Any other information that the Minister may request

b. For projects receiving less than $100,000 in government support the school board will submit a letter to Grants Branch, signed by the secretary-treasurer, certifying that it is proceeding with the projects when applying for the cash grant. An advance equal to 50 per cent of the estimated government support may be obtained by submitting Form A^304 BQRP(A)81 to Grants Administration.

7. Project Completion

School boards will carry out the work and then complete part "B" of the Statement of Claim form and forward two copies to the School Buildings Services Branch.

8. Final Inspection

A construction inspector will visit the projects and complete part "C" of the claim form. This claim form will then be forwarded to the Grants Administration Branch.

9. Final Payment

Grants Administration will release the remaining funds after all claims are received.

APPENDIX

SCHOOL BUILDINGS ACT

SCHOOL BUILDINGS REGULATION 1984

A. R. 344/84

SCHOOL BUILDINGS REGULATION

SECTION PAGE

Appendix -- School Buildings Act
School Buildings Regulation 1984 1

Definitions

Instructional Area 1
Operational Capacity 1
School Board 1
School Building Project 1
Total Capacity 1
Fixed Capacity 2

Form A - Application Form for New Construction 4
Form B - School Modernization Application Form . . . . 5&6
Form C - BQRP Application Form . . . . 7&8

Schedule 2 - Fixed Capacity and Areas

Table 1 - Permanent-Type Construction Senior High 9
Table 2 - Permanent-Type Construction Junior High 10
Table 3 - Permanent-Type Construction Elementary 11
Table 4 - Expandable-Contractible Schools - Core Section Junior High Schools - Senior High Schools 12
Table 5 - Expandable-Contractible Schools - Core Section Elementary Schools 13
Table 6 - Expandable-Contractible Schools - First School in a Utilization Sub-Area Core Section 13
Table 7 - Expandable-Contractible Schools - Portable Sections 14
Table 8 - Self-contained Portable Schools 14

SCHOOL BUILDINGS ACT

School Buildings Regulation, 1984

A. R. 344/84

1. In this regulation,

(a) "instructional area" means that part of the functional area of a school building that is composed of classrooms, opportunity rooms, early childhood services rooms, special education rooms, science experience classrooms and laboratories, gymnasiums, industrial arts rooms, industrial education shops, home economics centres, libraries, ancillary classrooms, lunchrooms and those storage areas that are considered by the board to be directly related to any one or more instructional areas;

(b) "operational capacity" means operational capacity as calculated in section 4;

(c) "school board" means a board as defined in the **School Act**;

(d) "school buildings project" means the construction, modernization or upgrading of space used for the instruction of school pupils;

(e) "total capacity" means total capacity as calculated in section 4.

2. Prior to starting the construction of a school building project, a school board shall complete and submit to the board, Form A, B, or C in Schedule 1.

3.(1) If the board considers that a school building project is warranted and it meets the requirements of this regulation, the board may approve the school building project in accordance with this regulation.

(2) On submission by a school board of a statement of final costs and on certification of the completion of a school building project by a construction inspector of the Department of Education, the board may approve completion of a school building project.

4.(1) For the purposes of this regulation, the fixed capacity shall be calculated by adding together the number of school pupils allotted to the instructional area of a school building or a school building project as follows:

	Part of Instructional Area	Number of Pupils
(i)	for each classroom, science room, ancillary classroom, lunchroom, portable classroom or business education area	25
(ii)	for each home economics, industrial arts, industrial education or vocational shop	20
(iii)	for each special education instructional area	10

(2) Subject to subsection (3), for the purposes of this regulation the operational capacity of a school division shall be calculated by adding together the total capacity of all school buildings, deducting 5% from the total capacity and rounding off to the nearest multiple of 5.

(3) Subject to subsection (4), on the application of a school division, the board may exclude from the calculation of total capacity in subsection (1), a school or portion of a school that is

(a) used for school board decentralized administrative services or special programs,

(b) leased to the public sector or non-profit society if the lease is approved by the Minister,

(c) constructed with no appropriation of funds from the Government, or

(d) disposed of with the approval of the Minister.

(4) School space leased to a private school, as defined in The Private Schools Regulations (Alta. Reg. 243/70), shall be included in the calculation of the total capacity.

5. The maximum gross area in respect of a school building project eligible for approval under this regulation that is not permanent construction of an addition, partial replacement or modernization of an existing school building is the sum of areas applicable to the facilities and total capacity of the school building project as determined from the Tables in Schedule 2.

6.(1) The board may not approve a school building project if the mill rate of a school division that is required to support the annual local costs of school construction exceeds 3.

(2) Notwithstanding subsection (1), the board may approve a school building project if the school division

(a) establishes a plan with the objective of reducing the mill rate, and

(b) the plan has received the approval of the Minister pursuant to the **Department of Education Act.**

7. The Board may not approve a school building project if the financial support for the project exceeds the amount calculated by the Minister pursuant to regulations under section 137(7)(c) and (d) of the **School Act.**

8. Upon approval by the Minister of the disposal of a school building, the board may determine the life expectancy of the school building.

APPLICATION FORM FOR NEW CONSTRUCTION

ESTIMATED COST AND FUNDING BY PROJECT

FOR THE YEAR 19__ DATE __________ 19__

A

NAME OF JURISDICTION ______________________ NO ________

NAME OF DISTRICT ______________________ NO ________

____
SIGNATURE OF SECRETARY-TREASURER

	PAST ENROLMENTS (SEPT. 30)					PROJECTED ENROLMENTS				
	19	19	19	19	19	19	19	19	19	19
TOTAL JURISDICTON ENROLMENT										
% CHANGE										

NAME OF PROJECT ______________________________________

PROJECT DESCRIPTION *

CAPACITY OF THIS PROJECT	
AREA OF THIS PROJECT	m²

* ATTACH SMALL SCALE PLANS AND DESCRIBE PROPOSED BUILDING PROJECT IN DETAIL

A ESTIMATED PROJECT COST

LAND PURCHASE	$
SITE DEVELOPMENT	$
CONSTRUCTION CONTRACT	$
ARCHITECT'S FEES	$
FURNITURE AND EQUIPMENT	$
WATER AND SEWER	$
OTHER (SPECIFY)	$
____________	$
____________	$
____________	$
TOTAL ESTIMATED PROJECT COST	$ ________

B ESTIMATED FINANCING BY SOURCE $P = E \times U \times A \times S$

ESTIMATED PROVINCIAL SUPPORT

EQUITY FACTOR		
UTILIZATION FACTOR		
AREA (m²)	m²	
SUPPORT LEVEL	$ /m²	
DISTANCE ALLOWANCE	$ /m²	
OTHER ALLOWANCE	$ /m²	
____________	$ /m²	
TOTAL ESTIMATED PROVINCIAL SUPPORT	$ ______ /m²	$ ________
LOCAL SUPPORT		$
OTHER SUPPORT		$
____________		$
TOTAL ESTIMATED PROJECT SUPPORT		$ ________

TOTAL ESTIMATED COSTS (SECTION A) MUST EQUAL TOTAL ESTIMATED SUPPORT (SECTION B)

NAME OF SCHOOL ______________________

ADDRESS ______________________

SPECIFY SCHOOL BOARD PRIORITY OF THIS PROJECT NO ____ ☐

SPECIFY PROVINCIAL PRIORITY NO. __________ ☐

FORM 236 A

SCHOOL MODERNIZATION APPLICATION FORM

B

ESTIMATED COST AND FUNDING BY PROJECT
FOR THE YEAR 19__ DATE__________

Name of Jurisdiction__________________ No. ______

Name of District__________________ No. ______

____
Signature of Secretary-Treasurer

	Past Enrolments (Sept 30)					Projected Enrolments				
	19	19	19	19	19	19	19	19	19	19
Total Jurisdiction Enrolment										
% Change										
Project School Enrolment										

Name of Project__________________

Room or Area__________ Age of Building__________ Type of Constuction__________

Project Description*:

Area (m^2) of this project	
Current capacity of school	
Capacity after Modernization	
Capacity change	

* Attach Statement of Program Development, School Facility Assessment Reports, small scale plans, description of proposed work, and cost estimates.
(For further information, refer to back of this form.)

A. ESTIMATED PROJECT COSTS

Architectural	$
Structural	$
Mechanical	$
Electrical	$
Code	$
Consultant's Fees	$
Other (specify)__________	$
__________	
__________	
__________	
Total Estimated Project Costs	$

B. ESTIMATED FINANCING BY SOURCE

Estimated Maximum Provincial Support ($P = E \times U \times A \times \frac{S}{2}$)*

Equity Factor		
Utilization Factor		
Area (m^2)	m^2	
Support Level (new construction)	$ /m^2	
Distance Allowace	$ /m^2	
Other Allowance	$ /m^2	
Modernization Support $\left(\frac{\text{support level + allowances}}{2}\right)$	$ /m^2	
Total Estimated Max. Provincial Support	$ /m^2	$
Local Support		$
Other Support__________		$
__________		
Total Estimated Project Support		$

Note: Total Estimated Costs (Section A) should equal Total Estimated Support (Section B.)
* If Total Estimated Cost is less than $A \times \frac{S}{2}$, use Total Estimated Cost in calculating the Provincial Support Estimate.

Name of School__________________

Address__________________

Specify School Board Priority of this Project No.	
Specify Provincial Priority No.	

FORM 236B

GENERAL INSTRUCTIONS

1. Application Form B, Summary Form C and related materials to be submitted in duplicate.
2. Outline of a School Modernization Program Submission.

   The following suggested outline will assist in developing a Modernization submission.

   A. Statement of Program Development
      1. Needs (Educational, Administrative, Community and Other Needs)
      2. Evaluation of Demographic Information
      3. Student numbers bussed to this school
      4. Inventory of this and other nearby building facilities

   B. Assessment of Facilities Selected for Modernization
      1. Evaluation reports on condition and adequacy of existing building structural, architectural, mechanical and electrical systems
      2. Recommended improvements to the above systems

   C. Submission of schematic plans, work description and cost estimates

3. Cost Estimate Format (for detailed project submission stage).

   The following general format may be used for estimating costs. Provide description and quantity for each work item.

(a) Architectural	Cost Estimate
1. Demolition	$
2. Interior Upgrading	
- floors	$
- walls	$
- ceilings	$
- doors & windows	$
- millwork	$
- acoustics	$
- redecorating	$
Subtotal	$________
3. Exterior Upgrading	
Subtotal	$________
(b) Structural	
Subtotal	$________

(c) Mechanical	Cost Estimate
1. Heating	$
2. Ventilation	$
3. Plumbing	$
Subtotal	$________
(d) Electrical	
1. Services and Distribution	
2. Lighting	
3. Outlets	
4. Intercommunication	
Subtotal	$________
(e) Code	
Subtotal	$________
(f) Others (Specify)	
Subtotal	$________
TOTAL	$________

4. Preliminary estimate of provincial support for modernization projects.

   a. General Modernization $P = E \times U \times A \times \frac{S}{2}$

   where P is maximum provincial support
   E (Equity Factor) = $(1 - 0.15e)$
   U Utilization Factor = $\frac{u}{0.85}$

   A is maximum gross area of a school building project eligible for financial support
   S is the financial support per square metre

   Details are outlined in the School Buildings Regulation

   b. Modernization of existing school space in lieu of new construction

   $$P = E \times U \times 1.10 \times A \times \frac{S}{2}$$

   provided that where $U \times 1.10$ exceeds one it shall be considered to be one

   c. Modernization of a small area for mandated program changes

   $$P = E \times A \times \frac{S}{2}$$

   NOTE: If school board's estimated cost is less than $A \times \frac{S}{2}$, the estimated amount should be used in lieu of $A \times \frac{S}{2}$ in the above funding formula.

   It must also be noted that the above formulae may be used to arrive at a preliminary estimate of provincial support as long as it is understood that final financial support may be less than the preliminary estimate. This is because final provincial support shall be based on a supported cost which shall be limited to the lesser of:

   (i) one half of the current support for new construction ($A \times \frac{S}{2}$) or a maximum level established by the School Buildings Board (whichever is less), and
   (ii) the actual cost of the modernization project.

5. Should clarification be required in completing this form, please contact Mr. Hoang Le, Engineering Manager at 427-2973 (Edmonton).

BQRP

BQRP-A-86
Form C

APPLICATION FORM

Submit Application Forms and All Related Material in Duplicate. Please refer to Instructions on the Back of this page

C

PROGRAM YEAR 19____

SCHOOL JURISDICTION ________________________________ NO.______________

SCHOOL NAME ________________________________ LOCATION__________

Sch. Board Priority Number	BQRP Category	Proposal (Specific details required)	Age of * Construction	Cost Estimate
			Total	

Secretary-Treasurer ____________________ Date________ 19___

* Age of that section of building in which the proposed project is being considered, or year that thi component last received funds under a similar BQRP.

Forward applications and all related material to: Program Co-ordinator School Buildings Services Branch.

Contact Person ______________________________ Phone No.____________________

INSTRUCTIONS

1. Applications to be submitted in metric. (School Board to provide all necessary measurements.)
2. Append in duplicate any details that may assist the School Buildings Board in fully understanding the proposal.
3. Sketch Plans of the entire school showing area involved must be attached.
4. Submissions under Category 1 (b) must be identified on an elevation of the area(s) involved.
5. Submissions under Category 4 must be documented by the pertinent Provincial Code Authority.
6. Complete cost estimate details to be appended to the application form.
7. Roof applications must be accompanied by a Roofing Consultant's (not roofer) Report.

NOTE: Submissions not completed in detail will be returned and reapplication may be made in the following year.

Enquiries about any of the programs may be directed to:

General - Fiore Berlin

Energy - Dave Cousins

Code - Trevor Gough

Construction Inspectors

William Belous

Jim Johnson

Trevor Gough

Ed Pardely

All the staff members listed may be contacted at 427-2973.

SCHEDULE 2

Table 1

Permanent-Type Construction
Senior High

A	B	C	D	EITHER/OR E
Fixed Capacity	**Maximum Area Per Pupil (square metres)**			
	Basic	**Bus. Ed.**	**Ind. Ed./ Home. Ec.**	**Voc. Ed.**
250 or less	10.69			
300	10.07			
350	9.30			
400	8.68	0.75		
450	8.40	0.62		
500	8.12	0.68	1.10	
550	7.77	0.62	0.99	
600	7.69	0.57	1.11	
650	7.48	0.53	0.95	
700	7.39	0.51	0.93	2.04
750	7.18	0.48	0.87	2.50
800	7.15	0.46	0.82	2.34
850	7.03	0.42	0.77	2.20
900	7.69	0.47	0.72	2.50
950	7.51	0.45	0.68	2.37
1000	7.36	0.43	0.65	2.60
1100	7.27	0.38	0.59	2.13
1200	7.03	0.36	0.55	1.96
1300	6.98	0.37	0.80	1.97
1400	7.30	0.35	0.73	1.90
1500	7.14	0.33	0.58	1.77
1600	7.09	0.31	0.64	2.00
1700	6.96	0.33	0.60	1.88
1800	7.22	0.31	0.80	2.02
1900	7.16	0.29	0.64	2.17
2000	7.00	0.30	0.61	2.07

Table 2

Permanent-Type Construction
Junior High

A	B	C
Fixed Capacity	Maximum Area Per Pupil (square metres)	
	Basic	Ind. Arts/ Home Ec.
100	7.53	
125	6.96	
150	8.05	
200	10.47	
250	9.31	
300	8.92	
350	8.74	
400	8.46	1.33
450	8.13	1.15
500	7.57	0.97
550	7.27	0.88
600	7.03	0.80
650	6.88	0.87
700	7.53	0.82
750	7.31	0.76
800	7.13	0.71
850	6.88	0.67
900	7.07	0.63

Table 3

Permanent-Type Construction
Elementary

A	B	C
Fixed Capacity	Maximum Area Per Pupil (square metres)	
	Basic	Gross Area
100	7.53	760
125	7.53	950
150	8.05	1210
175	8.36	1470
200	8.67	1740
225	8.98	2020
250	8.28	2070
275	7.72	2120
300	7.57	2270
325	7.42	2410
350	8.02	2810
375	7.89	2960
400	7.77	3110
425	7.65	3250
450	7.53	3390
475	7.41	3520
500	7.28	3640
525	7.15	3760
550	7.04	3890
575	6.91	3970
600	6.78	4070
625	6.61	4130
650	6.43	4180
675	6.55	4420
700	6.48	4540

Table 4

Expandable-Contractible Schools

Core Section
Junior High School

	A	B	C
Type of Facilities	Fixed Capacity	Maximum Area Per Pupil (Square metres)	Maximum Gross Area (Square metres)
6 x 6 Core	225	12.04	2710
8 x 8 Core	300	11.10	3330
10 x 8 Core	350	10.23	3580
10 x 8 Expanded Core with Home Economics and Industrial Arts	390	10.41	4060

Senior High School

A	B	C	D	E
Fixed Capacity	Maximum Area Per Pupil (Basic)	Maximum Gross Area (Basic)	Maximum Area Per Pupil Home Ec. and Ind. Arts)	Maximum Gross Area (Total)
325	10.77	3500	2.18	4210
350	10.22	3580	1.70	4170
400	10.22	4090	1.70	4770
450	10.22	4600	1.70	5370
500	10.22	5110	1.70	5960

Table 5

Expandable-Contractible Schools

Core Sections
Elementary

A Fixed Capacity	B Maximum Area Per Pupil	C Maximum Gross Area
150	11.34	1700
175	10.72	1880
200	10.12	2030
225	9.50	2140
250	8.91	2230
275	8.30	2290
300	9.92	2980
325	9.50	3090
350	9.07	3180
375	8.64	3240
400	8.21	3290

Table 6

Expandable-Contractible Schools
First School in a Utilization Sub-Area
Core Sections

A Fixed Capacity	B Maximum Area Per Pupil	C Maximum Gross Area
225	10.53	2370
300	10.37	3115

Table 7

Expandable-Contractible Schools Portable Section

A	B	C	D
Types of Facilities	Fixed Capacity	Maximum Area Per Pupil	Maximum Gross Area
2 classroom unit	50	4.20	210
4 classroom unit	100	4.00	400
6 classroom unit	150	4.00	600
8 classroom unit	200	4.00	800

Table 8

Self-Contained Portable Schools

A	B	C	D
Types of Facilities	Fixed Capacity	Maximum Area Per Pupil	Maximum Gross Area
Basic	50	6.50	330
	75	9.30	700
	100	8.20	820
	125	7.60	950
	150	8.50	1280
	200	8.70	1740

APPENDIX

SCHOOL BUILDINGS REGULATION

SCHOOL CAPITAL FUNDING ORDER 1984

SCHOOL CAPITAL FUNDING ORDER 1984

SECTION **PAGE**

Definitions for Calculation of School Construction Project Funding . . . 1

3a Area (A) . . . 1
b Equity (E) . . . 1
c Total Capacity . . . 1
d Instructional Area . . . 1
e Operational Capacity . . . 1
f Provincial Support (P) . . . 1
g Provincial Average Equalized Assessment Per Pupil . . . 2
h Support Per Square Metre (S) . . . 2
i School Building Project . . . 2
j Utilization Ratio (u) . . . 2
k Utilization Factor (U) . . . 3
l Depreciation Ratio (D) . . . 3
4a Total Capacity . . . 3
b Operational Capacity . . . 3
c Exclusions from Total Capacity . . . 3
d School Space Leased to a Private School . . . 3
5a Formula for school building project . . . 4
b Formula for school building project involving special education . . . 4
c Formula for replacment of an existing school building . . . 4
6a Formula for regular modernization . . . 4
b Formula for modernization carried out instead of new construction . . . 4
c Formula for modernization of a small area for a compulsory program implemented by Department of Education . . . 4
d Maximum Provincial Financial Support . . . 4
7a Regular BQRP Formula . . . 5
b Business Education Equipment Component . . . 5
8 Vocational Education Equipment . . . 5

Schedule A Maximum Support of Construction January 1, 1984 to December 31, 1984 . . . 6

Table 1 - Basic Construction . . . 6
Table 2 - Increase In Support Per Square Metre as a Result of Location and Distance . . . 6
Table 3 - Increase In Support Per Square Metre as a Result of Lack of Community Water or Sewage System . . . 7
Table 4 - Adjustment for New School Building Construction Projects Where Actual Cost is Less than Financial Support . . . 7

SECTION PAGE

Table 5 - Support for an Access Firelane 8
Table 6 - Support for Equipment Required for a Vocational Shop 8
Table 7 - Support for the Cost of Moving, Resetting and Reconnecting an Existing Portable Classroom 8
Table 8 - Support for the Cost of Repairing a Portable Classroom 8
Table 9 - Support for the Cost of Demolition of all or Part of an Existing Building 8
Table 10 - Support for the Cost of Overcoming an Unavoidable and Essential Building Restriction or Site Problem 8
Table 11 - Support for an Approved Clerk of the Works 8

Schedule B Maximum Support of Construction Scheme Approved by the Minister From January 1, 1985 to June 30, 1985 9

Table 1 - Basic Construction 9
Table 2 - Increase in Support Per Square Metre as a Result of Location and Distance 9
Table 3 - Increase in Support Per Square Metre as a Result of Lack of Community Water or Sewage System 10
Table 4 - Adjustment for New School Building Construction Projects Where Actual Cost is Less Than Financial Support 10
Table 5 - Support for an Access Firelane 11
Table 6 - Support for Equipment Required for a Vocational Shop 11
Table 7 - Support for the Cost of Moving, Resetting and Reconnecting an Existing Portable Classroom 11
Table 8 - Support for the Cost of Repairing a Portable Classroom 11
Table 9 - Support for the Cost of Demolition of All or Part of an Existing Building 11
Table 10 - Support for the Cost of Overcoming an Unavoidable and Essential Building Restriction or Site Problem 11
Table 11 - Support for an Approved Clerk of the Works 11

APPENDIX

SCHOOL BUILDINGS FUNDING ORDER 1984

1. This funding order applies to school building projects approved under the School Buildings Regulation 1984, pursuant to the School Buildings Act.

2. This funding order applies to the 1984 to 1985 fiscal period.

3. In the calculation of school construction project funding,

   a) "A" means the gross area (in square metres) that is government supported, with respect to modernization, or new construction;

   b) "E" means Equity Factor, which is calculated as follows:

      1 - 0.15(e),

      where "e" means the lesser of

      i) 1, and

      ii) the greater of

         (A) the ratio determined by dividing the equalized assessment per resident pupil of the school jurisdiction by the provincial average equalized assessment per pupil with respect to the year immediately prior to the year the tender or scheme of construction is approved by the Minister under the School Buildings Tendering Regulation (Alta. Reg. 333/77), and

         (B) 0.2;

   c) "total capacity" means total capacity as calculated in section 4;

   d) "instructional area" means that part of the functional area of a school building that is composed of classrooms, opportunity rooms, early childhood services rooms, special education rooms, science experience classrooms and laboratories, gymnasiums, industrial arts rooms, industrial education shops, home economics centres, libraries, ancillary classrooms, lunchrooms and those storage areas that are considered by the board to be directly related to any one or more instructional areas;

   e) "operational capacity" means operational capacity as calculated in section 4;

   f) "P" means Provincial support for a school building project calculated in accordance with the following formula:

      $P = E \times U \times A \times S$

g) "provincial average equalized assessment per pupil" means the ratio calculated in accordance with the following formula:

$$\frac{h + \frac{1000f}{i}}{r}$$, where

i) "f" means a school division's share of electric power and pipeline tax collected in counties, municipal districts, improvement districts or special areas pursuant to section 93(5) of the **Municipal Taxation Act**, and used in determining that school division's requisition on each municipality;

ii) "h" means the equalized assessment for a school division as determined pursuant to section 126 of the **School Act** with respect to the year immediately prior to the year the tender or scheme of construction is approved by the Minister pursuant to the School Buildings Tendering Regulation (Alta. Reg. 333/77);

iii) "i" means the net mill rate of the school division calculated in accordance with the following formula:

$$i = \frac{1000(g-f)}{h}$$

where "g" means the total requisition of a school division calculated pursuant to section 127 and 128 of the **School Act** with respect to the year immediately prior to the year the tender of scheme of construction is approved by the Minister pursuant to the School Buildings Tendering Regulation (Alta. Reg. 333/77);

iv) "r" means the number of resident pupils under the jurisdiction of the school division as defined in the Resident Pupil Regulation (Alta. Reg. 346/78) for the year immediately prior to the year the tender or scheme of construction is approved by the Minister pursuant to the School Buildings Tendering Regulation (Alta. Reg. 333/77);

h) "S" means the financial support per square metre applicable to a school building project determined from the Schedules as of the date the tender or scheme of construction is approved by the Minister under the School Buildings Tendering Regulation (Alta. Reg. 333/77).

i) "school building project" means the construction, modernization, or upgrading of space used for the instruction of school pupils."

j) "u" means the utilization ratio of a school division determined by dividing the enrolment in all schools of the school division as of the last school day of September immediately prior to the date that is 3 years after the date the tender or scheme of construction is approved by the Minister under the School Buildings Tendering Regulation (Alta. Reg. 333/77), by the operational capacity of all school buildings of the school division including the total capacity of all existing school buildings and any school building project in which 1 year elapses from the date of the tender or scheme of construction is approved by the Minister under the School Buildings Tendering Regulation (Alta. Reg. 333/77);

k) "U" means "u" divided by .85, but if the result exceeds 1 it is deemed to be 1.

l) "D" means the depreciation ratio with respect to a school building determined by dividing the number of years since it was constructed as of the year the tender or scheme of construction is approved by the Minister by the number of years of its life expectancy determined by the board.

4. a) The total capacity shall be calculated by adding together the number of school pupils allotted to the instructional area of a school building or a school building project as follows:

	Part of Instructional Area	**Number of Pupils**
i)	for each classroom, science room, ancillary classroom, lunchroom, portable classroom or business education area	25
ii)	for each home economics, industrial arts, industrial education or vocational shop	20
iii)	for each special education instructional area	10

b) The operational capacity of a school division shall be calculated by adding together the total capacity of all school buildings, deducting 5% from the total capacity and rounding off to the nearest multiple of 5.

c) Subject to subsection (4), on the application of a school division, the board may exclude from the calculation of total capacity in subsection (a) a school or portion of a school that is

i) used for school board decentralized administrative services or special programs,

ii) leased to the public sector or non-profit society if the lease is approved by the Minister,

iii) constructed with no appropriation of funds from the Government, or

iv) disposed of with the approval of the Minister.

d) School space leased to a private school, as defined in The Private Schools Regulation (Alta. Reg. 243/70), shall be included in the calculation of the total capacity.

5. a) The maximum Provincial support for a school building project included in a capital budget approved by the board that is to be paid, or in respect of which capital borrowings are to be retired in whole or in part, from funds available under the School Foundation Program Fund established under the **School Act**, shall be determined in accordance with the following formula:

$P = E \times U \times A \times S$

b) Notwithstanding subsection (a), the following formula shall be used to calculate maximum Provincial support for a school building project that is new construction or an addition to an existing school building which provides for integration of special education that is approved by the board under Section (4):

$P = E \times U \times 1.01 \times A \times S$

c) The following formula shall be used to calculate the maximum Provincial support for a school building project that is the replacement of an existing school building:

$P = E \times U \times D \times A \times S$

6. a) The following formula shall be used to determine the maximum Provincial support for a school building project that is the regular modernization of an existing school building:

$P = E \times U \times A \times S/2$

In this formula, U will not be less than .8500.

b) Notwithstanding subsection (a) the following formula shall be used to calculate the maximum Provincial support for a modernization project that is being carried out instead of new construction:

$P = E \times U \times 1.10 \times A \times S/2$

In this formula, U will not be less than .8500 and U x 1.10 shall not exceed "1".

c) Notwithstanding subsection (a) the following formula shall be used to calculate the maximum Provincial support for the modernization of a small area for a compulsory program implemented by Department of Education:

$P = E \times A \times S/2$

d) Notwithstanding sections (a), (b) and (c), maximum Provincial financial support will be S/2 or departmental supported costs whichever is less.

7. The following formula shall be used for estimating the level of Provincial support for Building Quality Restoration Program (BQRP):

   a) Regular BQRP

Departmental Supported Costs (Including Fees) X Age Factor* (If Applicable) X Sch. Board Equity Factor = Maximum Support

   b) Business Education Equipment Component

Approved Equipment List Costs X .50 = Maximum Support

8. Vocational Education Equipment in newly constructed schools will be funded in accordance with the following formula:

Equity X Utilization X Approved Equipment List Costs = Maximum Support

*Age Factor - The age of the section of building or the age that this project last received BQRP support, divided by the life expected as specified under the specific category. This ratio will not exceed 1.

Schedule A

Maximum Support of Construction Scheme Approved by the Minister from January 1, 1984 to December 31, 1984

Table 1 - Basic Construction

Type of Construction	Maximum Support Per Square Metre
Permanent type construction - 750 square metres or less	$870
Permanent type construction - over 750 square metres	805
Expandable - Contractible schools - Core sections	805
Permanent type construction - Academic Senior High schools	890
Permanent type construction - Vocational & Composite Senior High schools 11,000 square metres or less	940
Permanent type construction - Vocational & Composite Senior High schools over 11,000 square metres	870
Core Portables	575
Self-contained portable schools	575
Free-standing portable classrooms	460

Table 2 - Increase in Support per Square Metre as a Result of Location and Distance

Major Urban Centres

For the purpose of this Schedule, the major urban centres are the urban centres in Edmonton, Calgary, Red Deer, Lethbridge and Medicine Hat.

Support shall be calculated by adding to the "Maximum Support Per Square Metre" first a location differential and then a distance allowance.

For projects where distance can be calculated from more than one major urban centre the additional support will be the lowest of the calculated amounts.

	Portable Classrooms, Portable Sections and Self-Contained Portable Schools	Other Types of Construction
Location Differential		
Edmonton and Calgary	Nil	Nil
Red Deer and Lethbridge	$ 45	$ 65
Medicine Hat	55	75
Distance Allowances		
0 - 40 kilometres	Nil	Nil
41 - 80	$ 30	$ 40
81 - 120	45	65
121 - 160	60	90
161 - 200	70	105
201 - 280	90	125
281 - 400	105	145
401 - 600	115	155
Over 600	120	165

Special Urban Centres

For the purpose of this Schedule, special urban centres are the urban centres in Bonnyville, Grand Centre, Fort McMurray, and Grande Prairie. For projects within 20 km of a special urban centre the following differential shall be added to the "Maximum Support Per Square Metre" in lieu of additional support based on proximity to a major urban centre.

	Portable Classrooms, Portable Sections and Self-Contained Portable Schools	Other Types of Construction
Bonnyville, Grand Centre	$ 90	$ 135
Fort McMurray	115	155
Grande Prairie	90	135

Table 3 - Increase in Support per Square Metre as a Result of Lack of Community Water or Sewage System

Maximum support of $32 per square metre of new construction approved by the board.

Table 4 - Adjustment for new School Building Construction Projects Where Actual Cost is Less than Financial Support

Maximum support of $40.

Table 5 - **Support for an Access Firelane Required as a Result of Lack of a Public Street Acceptable as an Access Route for Fire Department Equipment.**

Support shall be based on $22 per square metre of the minimum area approved by the board and required for an access route in accordance with the Alberta Building Regulation, 1981 (Alta. Reg. 128/81), up to a maximum support of $22,000 per site.

Table 6 - **Support for Equipment Required for a Vocational Shop That is Included in a School Building Project.**

Support shall be subject to the funding formula.

Table 7 - **Support for the cost of Moving, Resetting and Reconnecting an Existing Portable Classroom, Portable Section or Self-Contained Portable School from One School District.**

Maximum support of $4,000. (Not subject to the funding formula)

Table 8 - **Support for the cost of Repairing a Portable Classroom, Portable Section or Self-Contained Portable School under Table 7 if it is Obtained from Another School Division.**

Maximum support shall be $10 per square metre, subject to the funding formula.

Table 9 - **Support for the Cost of Demolition of All or Part of an Existing Building over Which New Construction Must be Carried Out Where in the Opinion of the Board, the Demolition is Unavoidable.**

Maximum support shall be $11 per square metre, subject to the funding formula.

Table 10 - **Support for the Cost of Overcoming an Unavoidable and Essential Building Restriction or Site Problem.**

Maximum support shall be $21 per square metre, subject to the funding formula.

Table 11 - **Support for an Approved Clerk of the Works Employed by the School Jurisdiction for the Purpose of Monitoring the Construction of a Permanent School Building or Addition of 750 Square Metres or Greater or for a Modernization Where Government Support Exceeds $500,000.**

Support shall not exceed the lesser of $24,000 or the actual cost of employing the Clerk of the Works, predicated on a maximum of $2,000 per month.

Schedule B

Maximum Support of Construction
Scheme Approved by the
Minister from January 1, 1985 to June 30, 1985

Table 1 - Basic Construction

Type of Construction	Maximum Support Per Square Metre
Permanent type construction - 750 square metres or less	$845
Permanent type construction - over 750 square metres	$780
Expandable - Contractible schools - Core sections	$780
Permanent type construction - Academic Senior High schools	$845
Permanent type construction - Vocational & Composite Senior High schools 11,000 square metres or less	$895
Permanent type construction - Vocational & Composite Senior High schools over 11,000 square metres	$825
Core Portables	$575
Self-contained portable schools	$575
Free-standing portable classrooms	$460

Table 2 - Increase in Support per Square Metre as a Result of Location and Distance

Major Urban Centres

For the purpose of this Schedule, the major urban centres are the urban centres in Edmonton, Calgary, Red Deer, Lethbridge and Medicine Hat.

Support shall be calculated by adding to the "Maximum Support Per Square Metre" first a location differential and then a distance allowance.

For projects where distance can be calculated from more than one major urban centre the additional support will be the lowest of the calculated amounts.

	Portable Classrooms, Portable Sections and Self-Contained Portable Schools	Other Types of Construction
Location Differential		
Edmonton and Calgary	Nil	Nil
Red Deer and Lethbridge	$ 45	$ 60
Medicine Hat	$ 55	$ 70
Distance Allowances		
0 - 40 kilometres	Nil	Nil
41 - 80	$ 30	$ 40
81 - 120	$ 45	$ 60
121 - 160	$ 60	$ 85
161 - 200	$ 70	$ 100
201 - 280	$ 90	$ 120
281 - 400	$ 105	$ 140
401 - 600	$ 115	$ 150
Over 600	$ 120	$ 160

Special Urban Centres

For the purpose of this Schedule, special urban centres are the urban centres in Bonnyville, Grand Centre, Fort McMurray, and Grande Prairie. For projects within 20 km of a special urban centre the following differential shall be added to the "Maximum Support Per Square Metre" in lieu of additional support based on proximity to a major urban centre.

	Portable Classrooms, Portable Sections and Self-Contained Portable Schools	Other Types of Construction
Bonnyville, Grand Centre	$ 90	$ 130
Fort McMurray	$115	$ 150
Grande Prairie	$ 90	$ 130

Table 3 - Increase in Support per Square Metre as a Result of Lack of Community Water or Sewage System

Maximum support of $32 per square metre of new construction approved by the board.

Table 4 - Adjustment for new School Building Construction Projects Where Actual Cost is Less than Financial Support

Maximum support of $40 per square metre of new construction approved by the board.

Table 5 - Support for an Access Firelane Required as a Result of Lack of a Public Street Acceptable as an Access Route for Fire Department Equipment.

Support shall be based on $22 per square metre of the minimum area approved by the board and required for an access route in accordance with the Alberta Building Regulation, 1981 (Alta. Reg. 128/81), up to a maximum support of $22,000 per site.

Table 6 - Support for Equipment Required for a Vocational Shop That is Included in a School Building Project.

Support shall be subject to the funding formula.

Table 7 - Support for the cost of Moving, Resetting and Reconnecting an Existing Portable Classroom, Portable Section or Self-Contained Portable School from one School District to Another.

Maximum support of $4,000. (Not subject to the funding formula)

Table 8 - Support for the Cost of Repairing a Portable Classroom, Portable Section or Self-Contained Portable School Under Table 7 if it is Obtained From Another School Division.

Maximum support shall be $10 per square metre of approved area, subject to the funding formula.

Table 9 - Support for the Cost of Demolition of All or Part of an Existing Building Over Which New Construction Must be Carried Out Where in the Opinion of the Board, the Demolition is Unavoidable.

Maximum support shall be $11 per square metre of approved area, subject to the funding formula.

Table 10 - Support for the Cost of Overcoming an Unavoidable and Essential Building Restriction or Site Problem.

Maximum support shall be $21 per square metre, subject to the funding formula.

Table 11 - Support for an Approved Clerk of the Works Employed by the School Jurisdiction for the Purpose of Monitoring the Construction of a Permanent School Building or Addition of over 750 Square Metres or for a Modernization where Government Support Exceeds $500,000 or for a group of New Construction and Modernization Projects where the Combined Total Government Support Exceeds $500,000.

Support shall not exceed the lesser of $24,000 or the actual cost of employing the Clerk of the Works, predicated on a maximum of $2,000 per month.

APPENDIX

THE SCHOOL ACT

SCHOOL BUILDINGS TENDERING REGULATION

(ALBERTA REGULATION 333/77)

SCHOOL BUILDINGS TENDERING REGULATION

SECTION

PAGE

Definitions 1

Procurement shall be by public tender 1

.....unless another scheme is approved 1

Withdrawal of Tenders 2

Approval of Tenders 2

Modified Tendering Procedures 3

Tendering Procedures 3

Requirements in a Contract 5

Requirements with a Contract 5

Limitations to Management and Proposal Schemes 6

APPENDIX

THE SCHOOL ACT

SCHOOL BUILDINGS TENDERING REGULATION

Definitions

1. In this Regulation,

(a) "Minister" means the Minister of Education or a person designated by him under section 108 of The School Act;

(b) "modernization" means the remodelling or upgrading of existing space in a school building;

(c) "school building" means

(i) a school building to be used for the instruction of pupils, or

(ii) space approved by the School Buildings Board for support of a school building used for the instruction of pupils;

(d) "School Buildings Board" means the School Buildings Board appointed under section 2 of The School Buildings Act;

(e) "tender" means a tender called for by a board with respect to the purchase, construction, structural alteration, addition to or modernization of a school building.

Procurement shall be by public tender...

2. Subject to section 3, a board shall obtain tenders for the purchase, construction, structural alteration, addition to or modernization of a school building.

....unless another scheme is approved

3. (1) A board may submit to the Minister a scheme of purchase, construction, structural alteration, addition to or modernization of a school building other than that carried out by contract entered into following the acceptance of a tender obtained pursuant to section 2.

(2) A scheme submitted to the Minister under subsection (1) shall set out the following information in detail:

(a) the manner in which it is proposed to provide the materials, supplies and labour;

(b) an estimate of cost;

(c) the name and qualifications of the manager or foreman;

(d) the reasons for the selection of the scheme;

(e) any other information that the Minister may request.

(3) After the Minister approves a scheme submitted under this section the board may purchase, construct, structurally alter, add to or modernize a school building in accordance with the scheme.

Withdrawal of Tenders

4. Where a board calls for tenders, no person shall withdraw a tender submitted to a board until

(a) another person has entered into a contract with the board following the acceptance of a tender, or

(b) 35 days after the deadline for receiving tenders

whichever comes first.

Approval of Tenders

5. (1) Where a board obtains tenders, it shall submit an original signed and sealed copy of the tender that it intends to accept to the Minister for approval.

(2) In addition to the tender submitted under subsection (1), the board shall also submit to the Minister, the bid bond or certified cheque and consent of surety under section 7(8), and such other information as the Minister requires (including list of all tenders submitted) and, if the lowest tender is not accepted, the reasons for the proposed rejection of the lowest tender.

(3) A board shall not accept a tender that has not been approved by the Minister.

(4) Subject to subsection (5), a board shall accept the lowest tender.

(5) A board need not accept the lowest tender where

(a) there is an obvious, demonstrable error in the lowest tender,

(b) the lowest tender is incomplete or not prepared in accordance with the instructions to bidders,

(c) the board was not satisfied with the performance of the bidder on any of its recent previous projects, or

(d) the board does not wish to accept the tender for other specific reasons.

(6) Where a board does not accept the lowest tender by reason of subsection (5)(c) or (d), the board shall in addition to providing reasons for the rejection to the Minister also satisfy him that the rejection is justified.

(7) Where a board requires a tenderer to change a sub-contractor listed in a tender that it accepts, the board shall notify the Minister of the reasons that the change was required before the Minister approves the tender.

(8) When it submits a tender for approval, a board shall ensure and shall inform the Minister that

(a) development approval has been obtained for the project by the board,

(b) any by-laws necessary for the construction or financing of the projects have been passed by the board and approved by the Local Authorities Board, where applicable, and

(c) where applicable, an agreement under section 103(1) or section 169 or both of The School Act has been entered into by the board.

Modified Tendering Procedures

6. (1) A board that undertakes the construction, structural alteration, addition to or modernization of a school building with its own work force pursuant to a scheme approved by the Minister under section 3 may call for tenders to supplement its work force.

(2) A board that wishes to obtain, for use as a school building, a portable classroom, portable section, self-contained portable school or an industrial building from an established manufacturer on the basis of that manufacturer's plans or specifications may call for tenders if

(a) the tender call applies equally to all bidders, and

(b) all established factory manufacturers in Alberta are notified.

Tendering Procedures

7. (1) All calls for tenders other than tenders called for pursuant to section 6 shall be advertised in the manner prescribed by section 6 of The School Act.

(2) Alternate bids may be included in tenders if the board calls for alternate bids from all tenderers.

(3) If the board does not accept a tender on the basis of the basic bid, it may accept the tender on the basis of the basic bid as modified by alternate bids in a manner made known to all the tenderers and to the Minister when the tender is submitted for his approval.

(4) Tenders submitted to a board shall be complete in all details and submitted on the form, if any, prescribed by the board.

(5) Where the board prescribes a form for tender other than a standard form approved by the Canadian Construction Association and the Royal Architectural Association of Canada, the board shall notify the Minister of any deviations from the standard form when the tender is submitted for his approval.

(6) Where a completion date is specified in a call for tenders, the board shall not accept a tender unless the completion date is stated in the tender.

(7) Where a completion date is not specified in a call for tenders, the board shall not reject a tender for the sole reason that the tender states a completion date that the board considers unacceptable unless the tender is a tender called for under section 6(2).

(8) A certified cheque or a bid bond and consent of surety in an amount not less than 5% of the amount of the tender and for a period of not less than 35 days shall accompany each tender other than a tender solicited under section 6.

(9) The security for tenders solicited under section 6 shall be that prescribed by the board.

(10) Where the form of the bid bond or the consent of surety that accompanies the tender are other than the standard forms approved by the Canadian Construction Association, the board shall notify the Minister of any deviation from the standard forms when the tender is submitted for his approval.

(11) A board shall receive tenders at a location specified by the board up to the time and date specified by the board as the deadline for receiving tenders.

(12) A board shall open tenders in public at a time and date and location of which all tenderers have been given notice.

(13) The signature of an authorized representative of a tenderer and the corporate seal of a tenderer that is a corporation shall be affixed to the tender.

Requirements in a Contract

8. (1) Where a scheme of purchase, construction, structural alteration, addition to or modernization of a school building under section 3, or a tender is approved by the Minister, the board shall enter into a contract with the builder or tenderer and ensure that the contract

(a) is in substantial compliance with the scheme or tender,

(b) provides that the contract is not binding upon the parties unless the tender has been approved by the Minister,

(c) provides for compliance with The Builder's Lien Act by the builder or tenderer, and

(d) unless the board has adequate insurance coverage, provides that the builder or tenderer will obtain adequate insurance to protect the board in the event of any damage to property or injury to persons.

(2) A copy of each contract entered into under subsection (1) shall be forwarded upon execution to the Director of the School Buildings Services of the Department of Education.

Requirements with a Contract

9. (1) Subject to subsection (3), a contract entered into under section 8(1) shall be accompanied by

(a) a performance bond in amount of not less than 50% of the contract price, or

(b) a certified cheque in an amount of not less than 25% of the contract price,

as performance security and maintenance warranty.

(2) A bond or a certified cheque under subsection (1) shall remain in effect for a period of at least 12 months after issuance of the final certificate of completion by the board.

(3) A board may set its own requirements for performance security and maintenance warranty where a board enters into a contract

(a) for speciality work to supplement its own work force pursuant to a tender under section 6(1),

or

(b) for the provision of a portable classroom, portable section, self-contained portable school or industrial building pursuant to a tender under section 6(2).

Limitations to Management and Proposal Schemes

10. (1) Where the Minister has approved a scheme of purchase, construction, structural alteration, addition to or modernization of a school building under section 3, and the scheme involves the use of a management or construction company or an individual who is not an employee of the board as manager or foreman, the board shall

(a) advertise for applications for the position of manager or foreman,

(b) interview and select a manager or foreman from among all the applicants or, if there are more than three applicants, from among at least three of the applicants,

(c) obtain the approval of the Minister with respect to the applicant that the board chooses and the contract that the board intends to enter into with that applicant, and

(d) ensure that the manager or foreman does not undertake any construction other than

(i) hoarding;
(ii) site clean-up;
(iii) supply of temporary project shacks and cover;
(iv) supply of temporary heat;
(v) supply of temporary toilet facilities;
(vi) hoisting;
(vii) supply of temporary services including telephone, water and power to the site;
(viii) miscellaneous items for which a sub-contract bid is not usually called, including casual carpentry and blocking for other trades.

(2) All labour and materials not provided by the manager or foreman under subsection (1)(d) shall be provided directly by the board.

(3) Where the Minister has approved a scheme under section 3 which will result in the complete design and construction at a fixed price of a school building by a person or firm under contract with the board, the board shall

(a) call for proposals for the construction of the building by advertising in the manner prescribed in section 6 of The School Act,

(b) select the person or firm to carry out the construction from among the proposals or if there are more than five proposals, from among at least five of the proposals, and

(c) obtain the approval of the Minister with respect to the proposal that the board wishes to accept and the contract that the board intends to enter into with the tenderer.

SCHOOL BUILDINGS FACILITIES INSTRUCTIONAL AND NON-INSTRUCTIONAL AREA GUIDELINES

SCHOOL BUILDINGS FACILITIES

School Buildings Facilities Instructional and Non-Instructional Area Guidelines

SECTION

PAGE

School Categories 1

Category A 1
Category B 1
Category C 1
Category D 1
Others 1

Instructional Areas 2

Classrooms 2
Science Experience Classrooms 2
Ancillary Classrooms 2
Physical Education 3
Library 4
Cafeteria/Ancillary 5
Home Economics 5
Industrial Arts 5
Industrial Education 10-20-30 and 12 5
Vocational 6

Non-Instructional Areas 7

Administrative Areas 7
Staff Areas 8
Physical Education - Non-instructional Areas 8
Infirmary 9

SCHOOL BUILDINGS FACILITIES

A. School Categories

School categories are determined in accordance with Table A below.

Table A

Category of School	**Requirements**		
	Enrolment	**School Level**	**Other Requirements**
Category A	≧ 450(1)	Grades 1 to 12	≧ 150 enrolled in Grade 10 or above
	or: ≧ 350	Junior-Senior High	≧ 150 enrolled in Grade 10 or above
	or: ≧ 250	Senior High	
Category B	≧ 200		≧ 100 enrolled in Grade 7 or above
Category C	≧ 150		
Category D	< 150		
Others:			
- **Core Sections**			
- **Portables:**	Being portable classrooms or portable sections whether joined or free standing from any other category of school.		
- **Self Contained: Portable Sections**	Being schools that may be used without being associated in any way with another school building.		

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(1) Including full time equivalent pupils in E.C.S. Programs

B. Instructional Areas

The types of facilities and a number and maximum size for each type, for the instructional area are determined as set out in Table B.

Table B

Instructional Facilities

Type of Facility	School Category Or School Level	Enrolment	Number	Maximum Size
1. Classrooms	All	Any		70 sq. metres each
2. Science Experience Classrooms	Elementary		1 for each 200 Division II pupils or remainder of 100 or more	23 sq. metres as a science repository or 93 sq. metres (including storage) if developed together with a classroom
	Junior High		1 for each 200 pupils or remainder of 100 or more	121 sq. metres (including storage)
	Senior High		1 for each 200 pupils or remainder of 100 or more	121 sq. metres (including storage)
3. Ancillary Classrooms	Category A	Minimum to 400 401 to 600 601 to 800 Over 800	4 5 6 7	93 sq. metres 93 sq. metres 93 sq. metres 93 sq. metres or 0.5 sq. metres per pupil, whichever is greater
	Note: For a senior high with an enrolment of 250 to 400: one ancillary classroom may be increased to 140 sq. metres for a business education ancillary classroom.			

Table B (Continued)

Type of Facility	School Category Or School Level	Enrolment	Number	Maximum Size
3. Ancillary Classrooms (Continued)	Category B or C	Minimum to 400 401 - 600 601 - 800 Over 800	2 3 4 5	93 sq. metres 93 sq. metres 93 sq. metres 93 sq. metres
	Note: For a senior high with enrolment of more than 100, an additional ancillary room of 70 sq. metres may be added.			
	Category C	150 to 200	1 combined library/ ancillary	93 sq. metres
	Category D	75 to 149	1 combined library/ ancillary	93 sq. metres
4. Physical Education			**Units Or Teaching Stations**	**Floor Size** **Storage Size**
	Category A		1	$468\ m^2$ $37\ m^2$ (Floor ≈ 27.5m x 17m)
			2	$669\ m^2$ $47\ m^2$ (Floor ≈ 27.5m x 24.3m)
			3	$1003\ m^2$ $56\ m^2$
	Category B		1	$409\ m^2$ $37\ m^2$ (Floor ≈ 24m x 17m)
			2	$490\ m^2$ $47\ m^2$ (Floor ≈ 29m x 17m)
	Category C		1	$245\ m^2$ $37\ m^2$ (Floor ≈ 14m x 17m)
			2	409 m2 $47\ m^2$ (Floor ≈ 24m x 17m)

Table B (Continued)

Type of Facility	School Category Or School Level	Enrolment	Number	Maximum Size	
4. Physical Education (Continued)			**Units Or Teaching Stations**	**Floor Size**	**Storage Size**
	Category D with 75 or more pupils		Multipurpose Activity Room	149 m2	———
	Note: **The School Buildings Board must be satisfied that each unit or teaching station is to be used for at least 90% of each school day before it may approve a further unit or teaching station.**				
5. Library	Category A	Any		a) 186 sq. metres or b) 42 sq. metres for each 100 pupils to the lesser multiple of 42 sq. metres, whichever is the greater area	
	Category B	≧ 200		a) 130 sq. metres or b) 37 sq. metres for each 100 pupils to the lesser multiple of 37 sq. metres, whichever is the greater area	
	Category C	≦ 200	1 combined library/ ancillary	See Type 3. Ancillary Classrooms above	
	Category D	> 75	1 combined library/ ancillary	See Type 3. Ancillary Classrooms above	

Table B (Continued)

<table>
<tr><th>Type of Facility</th><th>School Category Or School Level</th><th>Enrolment</th><th>Number</th><th>Maximum Size</th></tr>
<tr><td>6. Cafeteria/ Ancillary</td><td>Any</td><td>≧ 200</td><td>1 Cafeteria/Study Hall or 1 Cafeteria/Ancillary including pertinent storage, kitchen and serving area</td><td>a) 37 sq. metres for each 100 pupils, to the lesser multiple of 37 sq. metres, or
b) 93 sq. metres whichever is the greater</td></tr>
<tr><td rowspan="2">7. Home Economics</td><td colspan="3">Multipurpose facility or a 1st or 3rd laboratory
Specialized food or fabrics facility or a 2nd or 4th laboratory</td><td>140 sq. metres
93 sq. metres</td></tr>
<tr><td colspan="4">Note: Home Economics facilities as well as Industrial Arts or Industrial Education facilities may be approved by the School Buildings Board on the condition that the facilities will be used for their purposes at least 80% of each school day and that there is no other suitable facility in the school division for the relevant course.</td></tr>
<tr><td rowspan="2">8. Industrial Arts</td><td colspan="3">Single laboratory
Double laboratory</td><td>260 sq. metres
372 sq. metres</td></tr>
<tr><td colspan="4">Note: See the above mentioned note for Home Economics facilities.</td></tr>
<tr><td rowspan="2">9. Industrial Education 10-20-30 and Industrial Education 12</td><td colspan="3">Single laboratory
Double laboratory
Triple laboratory
Quadruple laboratory</td><td>297 - 335 sq. metres
427 - 520 sq. metres
613 - 706 sq. metres
799 - 892 sq. metres</td></tr>
<tr><td colspan="4">Note: See the above mentioned note for Home Economics facilities.</td></tr>
</table>

Table B (Continued)

10. Vocational	Where facilities will be used sufficiently, the School Buildings Board may approve: a) facilities for Industrial Education 22 - 32 and, where prerequisites are not obtained through Industrial Education 10 - 20 - 30, facilities for Industrial Education 12, in senior high schools with an enrolment of 700 or more pupils, b) facilities for business education in senior high schools with an enrolment of 400 or more pupils, and c) the basic major equipment necessary to operate a facility set out in clause (a) or (b).

C. Non-Instructional Areas

Non-instructional areas for a number of types of facilities are provided in Table C for information only. Each school division has freedom and responsibility to establish appropriate non-instructional area limits.

Table C

1. Administrative Areas

Administrative areas may provide a centre for the administrative activity of the school and sizes are intended to be inclusive of circulation and storage space related to their function.

	Maximum Sizes				
Enrolment	Principal's Office	Vice-Principal's Office	Counselling Rooms	Secretarial And General Administration Space	Administrative Conference Space In Conjunction With Administration Centre Only
150 - 250	17 m^2	Nil	Nil	Not to exceed 2/3 of all space authorized from columns to left (Including Pertinent Storage)	Nil
251 - 450	17 m^2	14 m^2	11 m^2		Nil
451 - 600	17 m^2		22 m^2		19 m^2
601 - 750	17 m^2	Number as organization requires			33 m^2
751 - 1050	17 m^2				42 m^2
1050 and over	17 m^2				56 m^2 (Recommended to be adjacent to Counselling for double use)

2. Staff Areas

Staff areas are intended to provide working and organizing space for teachers.

Enrolment	Common Rooms	Staff Work Area	Washrooms	
			Men	Women
150 - 250	23 m^2	Nil	4 m^2	6 m^2
251 - 450	33 m^2	19 m^2	4 m^2	6 m^2
451 - 600	42 m^2	37 m^2	4 m^2	6 m^2
601 - 750	51 m^2	56 m^2	8 m^2	12 m^2
751 - 1050	56 m^2	74 m^2	8 m^2	12 m^2
1051 - 1350	60 m^2	93 m^2		12 m^2
	Thereafter @ 1.5 m^2 per staff member		Thereafter @ 2.5 m^2 per staff member	

3. Physical Education - Non-Instructional Areas

School Category	Stations	Dressing Rooms	Showers	Maximum Dressing & Shower Combined	Physical Education Offices @ 11 m^2
A	1	56 - 65	28 - 37	93	1
	2	---	---	--	+1
	3	28 - 33	14 - 19	46	+1
	4	28 - 33	14 - 19	46	+1
B	1	46 - 56	28 - 37	84	1
	2	---	---	--	+1
	3	23 - 28	14 - 19	42	-
	4	23 - 28	14 - 19	42	-
C	1				1
	2				-
	3				+1
	4				-

4. Infirmary

There may be an infirmary in schools with an enrolment in excess of 75 pupils, which facility should contain a washroom and provide bed rest for pupils who are sick or injured. An infirmary will normally not exceed 25 m^2 including washroom. Typically, a second infirmary may be needed in a school in which the enrolment exceeds 500.

BUILDING QUALITY RESTORATION PROGRAM

1984 - 1988

BQRP GUIDELINES

Government of the Province of Alberta,
Department of Education,
Building Quality Restoration Program

SECTION **PAGE**

Program Statement

Introduction 1
Duration of Program 1
Objectives 2
Guiding Principles 2
Procedure 3
Financing 5
Approvals 5
Payments of Outright Grant 6
Borrowings 7
Debenture Funding Procedures 7
Categories of Projects 8
Structural 8
Roof 8
Windows and Glass Block 9
Floor Covering 10
Major Structural Components 10
General Interior Upgrading 11
General Exterior Upgrading 11
Mechanical 13
Plumbing 13
On Site Services 13
Water Supply and/or Sewage Disposal Systems 13
Heating Systems 14
Air Circulation Systems 15
Conversions 16
Electrical 17
Code Requirements 18
Fire Prevention Branch 18
Boilers Branch 20
Gas Protection Branch 20
Electrical Protection Branch 20
Plumbing Inspection Branch 20
Occupational Health and Safety 20
Alberta Building Standards 21

SECTION **PAGE**

Business Education Equipment 21

  Elementary and Junior High School Computer Project 21

  Senior High School Business Education Equipment Upgrading 21

Energy Conservation Measures 22

Other Approved Ministerial Programs 23

Appendix A - Application Form 24

Appendix B - Application Procedures 25

Appendix C - Yearly Summary Sheet 26

Appendix D - Instructions for Completing Yearly Summary Sheet 27

Appendix E - Distance (By Air) Allowances for BQRP Support Prices 28

Appendix F - BQRP - 5 Year Program 1984 - 1988 29

Appendix G - Application for BQRP Advances 30

GOVERNMENT OF THE PROVINCE OF ALBERTA

DEPARTMENT OF EDUCATION

BUILDING QUALITY RESTORATION PROGRAM

PROGRAM STATEMENT

A. INTRODUCTION

The Building Quality Restoration Program (BQRP) includes the following categories which qualify for Provincial Government financial support:

1. Structural
2. Mechanical
3. Electrical
4. Code Requirements
5. Business Education Equipment Upgrading
6. Energy Conservation Measures
7. Other Approved Ministerial Programs

B. DURATION OF PROGRAM

The BQRP commenced on January 1st, 1984 and, except for business education equipment replacement, will end on December 31st, 1988. The business education category will terminate on December 31, 1986. The program will be reviewed annually and deletions from or additions to it may be made.

Code Requirements (Category 4) will be monitored on an annual basis and sections of this category may be terminated at the end of a given year.

School Boards receiving recognition of need in one calendar year will be given time to complete the projects in the following calendar year (see Time Chart in Appendix F).

C. OBJECTIVES

The Restoration Program is intended to assist School Boards in:

1. Improving the quality of the school environment and prolonging the life of the facility for educational use and the replacement of selected major components which have failed. (It is not intended to repair or replace components that have been damaged or rendered useless by acts of vandalism.)
2. Offsetting the costs involved as a result of the implementation of Regulations relative to the Alberta Worker Health, Safety and Compensation and the General Safety Services Division of Alberta Labour.
3. Replacing and upgrading business education equipment in order to meet current educational program requirements.
4. Replacing or adding to components which will result in energy conservation and subsequent cost savings. (Discretion must be used when comparing replacement or improvement costs with potential school life energy cost savings.)

D. GUIDING PRINCIPLES

1. The School Board Minute relative to the application(s) is to be quoted on the BQRP yearly summary sheet.
2. Each proposed project will be considered individually by the School Buildings Board. The Board will rule on what may be accepted for support and, designate maximum financial support prior to commencement of work. Department personnel will carry out initial, final and other necessary inspections and determine eligible costs up to designated maximums.
3. Fees will be considered for support in the total cost of the project(s), when external consultants for BQRP projects are deemed to be necessary by the School Buildings Board. For 1984 - 1988 BQRP projects where external consultants are not employed, an administration fee equal to two per cent of government support, (after application of the formula), to a maximum of $30,000 per jurisdiction will be granted. This fee will be calculated by the School Buildings Inspector, when he processes part "C" of the claim form 1304-1315-A-84. (The revised number for 1985 will be 1307-85)

4. No project may include any item for which support is otherwise available under provisions of the School Buildings Regulation 1984, nor will items of normal maintenance be included. Maximum support prices for proposed projects will include the distance allowance given in Appendix E.

5. Projects which received consideration for component upgrading under similar programs will be pro-rated, based on the date they last received support. If recognition of need given in any calendar year of the program is not acted upon, reapplication may not be considered until the second subsequent year. For work not completed or claims not made by the deadline, as indicated in the Time Chart (Appendix F), an application for an extension of time will be required. If an extension of time is not requested by December 31 of the year following the recognition, the project will be cancelled by the School Buildings Board.

6. The School Buildings Board may prioritize school board projects for funding in accordance with Provincial priorities.

E. PROCEDURE

1. The program guidelines describe the procedures to be followed to obtain support under this program. The categories are listed and school board applications should refer to them specifically. Submissions not completed in enough detail will be returned to the school board. Reapplication may be made for funding in the subsequent program.

2. When heating, water supply, sewage disposal or structural failure creates an emergency situation, the school board shall phone the BQRP Coordinator, prior to the commencement of work, and describe the problem. The Coordinator will prepare a report and submit it to the School Buildings Board. Subsequently, the school board will submit the pertinent application forms (Appendices A and B) and details, as soon as possible, for School Buildings Board review.

   When the school board proceeds with such repairs, these will be regarded as its own initial responsibility and does not necessarily commit the School Buildings Board to financial support.

3. Consultation is available prior to submission, and is recommended if difficulty arises with details of a specific category.

4. Application is to be made to the School Buildings Board only for projects which qualify specifically under this program.

5. A Building Quality Restoration Program Application Form (Appendices A and B) and all related materials are to be submitted in duplicate for each school and should show the items in order of priority. The requirements indicated on the application form must be fulfilled.

6. A Building Quality Restoration Program Summary Sheet (Appendices C and D) summarizing all BQRP submissions, is to be submitted in duplicate for the program year.

7. Submissions under the BQRP Capital Plan shall be made by:

   February 15, 1984 for 1984 Program Year
   June 30, 1984 for 1985 Program Year
   March 31, 1985 for 1986 Program Year
   March 31, 1986 for 1987 Program Year
   March 31, 1987 for 1988 Program Year

8. In the event that the program is oversubscribed the following priorities will be used:

   First priority will be given to projects designed to remediate health, safety or acute structural deficiencies in school buildings.

   Second priority will be given to projects designed to overcome immediate needs to preserve the quality of school buildings. Projects could include mechanical systems, electrical systems, codes, and structural deficiencies.

   Third priority will be given to projects designed to improve the quality of electrical and mechanical components, and the aesthetics or architectural finishes of school facilities.

   Some funds will be earmarked for special purposes, such as energy conservation, business education equipment upgrading and ministerially approved special projects.

9. After all submissions are received, school boards will be notified about projects that would qualify for BQRP support in a given program year. The summary sheet given in (Appendix C) will indicate the projects which qualify. This information may be used for budget purposes only. Official recognition must be received from the School Buildings Board before commencing the project.

10. When a modernization project is found to fit better into a BQRP category, it will be transferred to the BQRP with permission of the jurisdiction. When a modernization project fails to receive funding in any year because of low priority, and when it contains an element or elements that would normally be considered under BQRP guidelines, the jurisdiction will be given 30 days to

resubmit the project for consideration as a BQRP project in the current year. Alternatively, the school board may choose to resubmit the project as either a modernization or BQRP project in the next planning cycle.

11. Inspections may be carried out prior to approval by the School Buildings Board. No support will be given unless approval precedes commencement of work and the work is carried out as approved.

12. The statement of claim form 1304-1315-A-84 (revised 1307-85) will accompany the recognition of need letter. Upon completion of the total project, the school board completes Part "B" of the claim form and returns two copies to the Program Coordinator for processing. (It should be noted that combined costs are not acceptable. All items must be accounted for.)
    The claim form will be forwarded to the Grants Administration Unit for payment following the final inspection.

13. Except for business education equipment, all applications should be forwarded to:

Mr. Fiore Berlin
Program Coordinator
Devonian Building,
9th Floor, West Tower
11160 - Jasper Avenue
Edmonton, Alberta
T5K 0L2

14. Forward business education equipment applications to:

Mr. A. A. Day,
Associate Director, Industrial Education
3rd Floor, West Tower
11160 - Jasper Avenue
Edmonton, Alberta
T5K 0L2

F. FINANCING

1. Approvals

School systems with less than 15,000 pupils are required to adhere to School Buildings Tendering Regulation (AR 333/77) for any one BQRP project item receiving more than $100,000 government support. (NOTE: A project could have several items in one school which total over $100,000. This section refers to one item only.)

- Obtain School Buildings Board approval for a project under BQRP (Section 105 of the School Act 1980).

- Arrange financing for the project(s).

- Submit to the School Buildings Services Branch the original tender or other scheme of construction for processing for Ministerial approval when the government support for a project item exceeds $100,000.00.

- Submission of a signed contract between the contractor and the school board, or the board's letter to the School Buildings Board indicating that the work has commenced on the project, will initiate the funding process.

2. Payments of Outright Grant

The procedures for the payment of advances will be as follows:

- One advance payment will be made per quarter on application form A0304 BQRP A-81 (see Appendix G) from the Secretary-Treasurer of the school jurisdiction. A quarter shall be the quarter of the Provincial Government fiscal year, as follows:

  - first quarter: April 1 to June 30
  - second quarter: July 1 to September 30
  - third quarter: October 1 to December 31
  - fourth quarter: January 1 to March 31

- The first advances on projects approved for the 1984 program year will be made beginning April 1, 1984, on application from the Secretary-Treasurer. (See Appendix G)

- The advances will be based on projects which have been given recognition of need by the School Buildings Board and have been certified by the Secretary-Treasurer as having commenced.

- The advance will be equal to 50 per cent of the estimated supported amount given in the recognition of need by the School Buildings Board, to a maximum of $100,000.00.

- Advances will be made on the building portion of BQRP.

- Claim submissions will be applied against outstanding advances. When sufficient claims have been submitted and processed to cover the advances paid then additional outright grant payments will be made, if the $100,000.00 maximum has not been reached.

- Upon completion of the total project fill out Part B according to the instructions on the back of the claim form 1304-1315-A-84. Return two copies to F. Berlin, Program Coordinator, School Buildings Services Branch. Following final inspection the forms will be submitted to Grants Administration Unit.

3. Borrowings

- Business Education equipment upgrading will be funded by an outright grant for the supported amount.

- Financing for other BQRP projects will be by outright grants for supported project costs to a maximum of $100,000 relative to all projects (excluding Business Education equipment upgrading) approved for that program year. If the total estimated supported costs exceed $100,000 in a program year, no outright grant will be available and the full amount must be financed by debenture borrowing.

- The unsupported costs may be financed by debentures, short-term loans or current operating fund.

4. Debenture Funding Procedures

The following procedures are to be followed by school boards when applying for debenture funds:

- The initial debenture will represent 50 per cent of the estimated costs of approved individual project items in a school(s) for which notification has been received that work has commenced.

- The board should indicate project items and estimated costs when applying for the debenture.

- Further debenture advances will be processed up to 75 per cent of the estimated costs of approved individual project items in a school(s) for which notification has been received that 75 per cent of the work has been completed.

- The final debenture issue amount, will be based on the final claim (Form #1304-1315-A-84) submissions to the Finance and Administrative Services Branch and its determination of support based on these submissions.

- Financing should be arranged well in advance with the School Business Administration Services Branch in order to avoid difficulties.

- Please refer to Page 5 for final claim procedures.

G. CATEGORIES OF PROJECTS

1. STRUCTURAL

a. Roof

Replacement of entire, or major part of a roof membrane and damaged insulation because of failure (patching or repairs are not supported). A roofing consultant's (not a roofer) report on the condition of the existing roof must be included with the submission. Existing membrane and gravel must be removed to the insulation or deck in order to receive support. Supported items include:

- Roof sections of 140 m^2 (15 squares) or more
- Complete portable classroom roofs
- Removal of skylights in conjunction with new roofing
- Control joints
- Additional roof drains if required to prolong the life of the building
- Tying roof drains to storm sewers
- Additional roof insulation up to R-12* (in conjunction with roof replacement)
- Additional roof insulation over R-12* (in conjunction with roof replacement and accompanied by an Engineer's report on Roof Load). Additional weight factors on supporting structures should be studied and should conform to the Alberta Building Code
- Double pour and gravel (in conjunction with roof replacement)
- Replacement of deteriorated decking (in conjunction with roof replacement)
- Redesign of perimeter flashing
- Independent Inspections (commencing 1986 program)

Not Supported are:

- Roof maintenance
- Resaturation
- Cap sheet
- Repairs to flashing
- Repairs to skylights
- Repairs to roof drains

* R value measured from the underside of the decking.

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

Consultant's Report to Include:

(i) Description of roof system (to be determined by cut test)

- Age of existing roof section(s)
- Total roof area
- Affected roof area(s)
- Surface membrane
- Insulation
- Vapor barrier
- Roof deck

(ii) Existing conditions

(iii) Recommendations

b. Windows and Glass Block

Replacement of:

- Deteriorated sash and/or frames. Must be major portion of area involved
- Sealed units (not broken) that have failed may be supported for replacement with sealed units, if more than 60 per cent of the section is involved

Blocking out of windows and/or glass block (including the installation of new vent sash) due to excessive heat loss or solar heat build up or failure of glass block or windows

Not Supported are:

- Window maintenance
- Individual window units
- Window hardware
- Broken glass
- Damage due to vandalism
- Sun screening
- Solar film

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

c. Floor Covering

Replacement of:

- Existing floor covering due to failure
- Battleship lino (regardless of condition)
- Hardwood floors in classrooms to a more suitable floor covering
- Tile and lino in library (regardless of condition)
- Gymnasium flooring to acceptable standards
- Stair treads

Installation of:

(i) Carpet
- in approved library areas
- open teaching areas over 185 m^2
- administration areas
- band rooms and music rooms
- recognized ECS rooms
- special education classrooms

Age Factor
- 10 years or more at equity support
- Under 10 years, by pro-ration on 10 years, at equity support

(ii) Floor Coverings in Other Areas (including gym floors)

Age Factor
- 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

(iii) Carpet in any area other than as specified in Item (i), support will be 2/3 of Item (ii)

Not Supported are: - Refinishing of hardwood floors

d. Major Structural Components

Replacements because of failure:

- foundations
- structural members
- sub-floors and joists
- areas vital to the structural stability of the building
- weeping tile including waterproofing

Age Factor - 25 years or more at equity support
- Under 25 years, by pro-ration on 25 years, at equity support

e. General Interior Upgrading

(i) Total plant or sections of buildings and/or washrooms, shower rooms, corridors and gyms. In total or as separate items:

- Upgrading of ceilings to acceptable standards
- Upgrading of walls to acceptable standards
- Lowering of ceilings (of 3.35 m or over)
- Replacement of doors and millwork
- Replacement of chalkboards and tackboards
- Replacement of built in cabinets (only in conjunction with general upgrading)
- Acoustical treatment for specified needs
- Installation or replacement of lockers
- Hardware (only in conjunction with recognized door replacement)
- Fibreglass shower stalls
- Providing storage closets in classrooms
- Shower & toilet partitions
- * - Provisions for the handicapped

Not Supported are:

- Painting (as a separate item)
- Individual doors (except under code)
- Replacement of metal shower cabinets with metal shower cabinets
- Enlarging of any area (this is considered under School Buildings Regulation)
- Repairs to lockers
- Lockers in shower and dressing rooms
- Boot racks

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

* Age Factor - 5 years or more at equity support
- Under 5 years, by pro-ration on 5 years, at equity support

f. General Exterior Upgrading

(i) Component Replacement
Replacement because of failure and would include:

- Exterior doors and frames
- Exterior hardware (only in conjunction with recognized door replacement)
- Soffits and fascia
- Exterior finish
- Chimneys
- Steps, landings and sidewalks
- Replacement of canopies
- Eavestroughs, downspouts and splashpads
- * - Provisions for the handicapped

Not Supported are:

- Relining chimney
- Fencing and playground equipment
- Stucco repairs
- Painting

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

* Age Factor - 5 years or more at equity support
- Under 5 years, by pro-ration on 5 years, at equity support

(ii) Complete Exterior Upgrading (Where Interior Modernization is not considered)

- Projects to improve the aesthetics of school exteriors which will have the effect of making the building more acceptable to the community

- Clad single block gymnasium walls

Age Factor - 25 years or more at equity support
- Under 25 years, by pro-ration of 25 years, at equity support

Projects will be ranked in order of priority. Exterior Upgrading will be based on age with buildings constructed prior to 1960 receiving highest priority.

(iii) Site Upgrading

- Positive drainage, building up grade elevations to a distance of 15 m from the building
- Sidewalks (where none exist)
- Tie in rain water leaders and surface water to storm sewers

Age Factor - 5 years or more up to a maximum of $10,000.00 per site at equity support.

2. MECHANICAL

a. Plumbing

(i) Replacement in whole or major part of system because of failure and will include:

- Basins and trim
- Toilets
- Urinals
- Drinking fountains
- Hot water heaters (commercial units)
- Water storage tank over 900 litres

Not Supported Are:

- Hand dryers
- Dispensers
- Hot water heaters (residential)
- Domestic fans

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

b. On Site Services

(i) Replacement in whole, or major part of system, because of failure and will include: (within school property only)
  - water and sewer lines
  - Replacement of natural gas lines due to certified failure

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

c. Water Supply and/or Sewage Disposal Systems (If failed or documented for replacement by an authorized agency of government)

- Drilling of new wells
- Providing of new dugouts for water reservoirs
- Replacement or enlargement of sewage lagoons
- New Nodak sewage piles
- New sewage disposal fields
- New septic tanks if required
- Cisterns

Not Supported are:

- Repairs to septic tanks
- Replacement or repairs to sewage or water pumps except in conjunction with complete new system
- Maintenance on any of the above system

Age Factor - Minimum age 5 years
- Over 5 years, at equity support

d. Heating Systems (If failed or considered inadequate)

(i) (a) Forced Air Systems (Furnace failure must be documented by a recognized authority, preferably the Gas Protection Branch)

Eligible for Support:

- Heating systems (complete)
- Furnaces
- Enlargement of system, if required
- Replacement of oil fired units to natural gas units
- Replacement of obsolete conversions
- Modifications to existing systems
- Ducting
- Zoning
- Complete flue if existing has failed

Not Supported are:

- Individual control valves or thermostats as separate items
- All fittings as separate items
- Maintenance
- Flue repairs

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

(b) Heat Exchangers (Because of certified failure)

Age Factor - 10 years or more at equity support
- Under 10 years, by pro-ration on 10 years, at equity support

(ii) Steam, Hot Water

Boiler replacement because of failure or obsolescence

Eligible for Support:

- Boiler replacement
- Distribution lines
- Zoning, if necessary
- Major repairs which may include:
    Complete retubing
    Replacement of cast iron sections
    Cutting off water legs
    Replacement of stay bolts
- Enlargement of system (mechanical consultant's report required)

Boiler failure and major repairs must be documented by the Boilers Branch, Alberta Labour

Not Supported are:

- Fire brick relining
- Boiler water treatment apparatus
- Circulating pumps
- Expansion tanks and flash tanks
- Existing controls on the boiler and repairs to same
- New burners (except as in Category No. 2f Conversions)
- Maintenance or replacement of existing valves

Age Factor - 25 years or more at equity support
- Under 25 years, by pro-ration on 25 years, at equity support

(iii) Redesign Of Inadequate Heating Systems If Considered Economically Feasible (mechanical consultant's report required)

Age Factor - 35 years or more at equity support
- Under 35 years, by pro-ration on 35 years, at equity support

e. Air Circulation Systems (to conform to Alberta Buildings Standards)

(i) Complete Ventilation System
Total plant or section or building

Age Factor - 35 years or more at equity support
- Under 35 years, by pro-ration on 35 years, at equity support

(ii) Ventilation (General)

- Gymnasium
- Library
- General instructional areas
- Science laboratories and preparation rooms
- Ancillary
- Lunch study
- Washrooms and dressing areas
- Administration area
- Upgrading of existing ventilating system

Not Supported are:

- Air conditioning
- Installation of domestic fans

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

(iii) Local Exhaust Systems (Including Make-Up Air Units) for Specific Areas (To conform to Occupational Health and Safety Standards)

- Photographic darkrooms
- Carpentry
- Automotives
- Welding
- Plastics
- Duplicating room
- Pottery and ceramics
- Fine Arts laboratories
- Science fume hoods (Complete Mechanical consultant's drawings required)

Consultation with Occupational Health and Safety is recommended.

Age Factor - Minimum age 5 years
- Over 5 years, at equity support

f. Conversions

Conversions of existing heating systems to natural gas, existing private water supply and/or sewage systems or private electrical systems to readily available public systems are included and will include valid on-site costs only. Not included are meters or costs of joining the utility system, such as co-operative membership.

Age Factor - Minimum age 5 years
- Over 5 years, at equity support

3. ELECTRICAL

- Replacement of one incandescent fixture by one fluorescent fixture in non-instructional areas
- Replacement of obsolete fluorescent fixtures, (starter-type, unprotected ballast, instant start, old egg crate fixtures with discoloured lens older than 15 years) as follows:
  - Up to one 1200 mm fluorescent tube per 2 m^2 in classrooms and instructional areas
  - Up to one 1200 mm fluorescent tube per 4 m^2 in gyms
- Increase fluorescent fixtures as follows:
  - Up to one 1200 mm fluorescent tube per 2 m^2 in classrooms and instructional areas
  - Up to one 1200 mm fluorescent tube per 4 m^2 in gyms *

  (Replacement of obsolete fixtures should be considered at this time)

- Additional outlets (interior only)
- Increase main service (consultant's report required)
- New distribution panels, if required
- New wiring
- Transformers (unless utility owned)
- 3 phase for required areas
- Upgrading for business education needs

Not Supported are:

- Drama lighting
- Inter-com systems
- Car plug-ins
- Exterior flood lighting

Age Factor - 20 years or more at equity support
- Under 20 years, by pro-ration on 20 years, at equity support

* This support may be used toward the installation of other energy efficient lighting, e.g. high pressure sodium or metal halide fixtures

4. CODE REQUIREMENTS (Subject to Annual Review)

All applications under this category must be accompanied by an approved plan to overcome the deficiency of the code requirement and must be signed by the Alberta Government authority governing that particular section, before consideration for support will be given by the School Buildings Board. Code deficiencies noted during original construction will not be supported. (Items that qualify under other specific categories will not be considered under this category.)

Age Factor - Minimum age 5 years
- Over 5 years, at equity support

Procedure to be followed when applying for support under this category:

- Inspectors of respective agencies must issue a report to a school jurisdiction regarding breaches of code requirements.

- The school jurisdiction should appeal directly to the specific Provincial Department if it feels that the requirements in the report are unreasonable.

- The school jurisdiction will consider the inspection report(s), and present a plan for correction of the breach of code requirements to the specific Provincial Department for approval.

- The school jurisdiction will then submit an inspector's report(s), the plan of action for the correction of the deficiency (already approved by the specific Provincial Department), a cost estimate and a completed application Form (see appendices A, B, C and D) to the School Buildings Board for its consideration.

- After approval, the School Jurisdiction will perform the work and upon completion of the total project fill out part B as instructed on the back of the claim form 1304-1315-A-84 and return two copies to the Program Coordinator, School Buildings Services Branch. The claim form will be forwarded to the Grants Administration Unit for payment following the final inspection.

Code Requirements Considered

a. Fire Prevention Branch

Supported items:

(i) Service rooms, storage rooms and closets, janitor's closets, etc.

- Fire rate or replace walls and ceilings
- Fire rate or replace doors and frames
- Installation of automatic self-closing devices on doors

(ii) Means of egress:

- Enclose and/or fire rate vertical exit stair shafts, including doors and automatic self-closers
- Installation of approved illuminated exit signs (directional where necessary)
- Classroom to corridor fire rated separations
- Emergency lighting for all means of egress
- Reduction of flame spread ratings in means of egress
- Fire rated separations between floors
- Required panic hardware on exit doors, where no panic hardware exists

(iii) Fire Alarm and Automatic Fire Detection Systems:

- Installation or upgrading of fire alarm systems (Break glass stations, bells, etc.)
- Verification of fire alarm system (copy of certificate required)
- Annunciator panel for fire alarm systems
- Emergency power supply for fire alarm systems
- Smoke detectors/heat detectors
- Magnetic hold-open devices (although magnetic hold-open devices are not a code requirement they will be considered as an alternate).

(iv) Fire Protection:

- Installation of automatic fire extinguishing systems
- Installation of standpipe and hose systems

The following will not be supported:

- Fire detectors in libraries
- Gas leak detectors
- Emergency-powered exit lights (in locations where existing exit lights are acceptable)
- Replacement of existing hardware (as a separate item)
- Drywall for underside of stage
- Fire extinguishers
- Recharging fire extinguishers
- Fire hose and nozzles

- Flammable liquid containers
- Minor items of maintenance and repair
- Fireproofing drapes
- Exterior storage sheds
- Expendable items and equipment
- Fire lanes

NOTE: Submit plans for correction to the Provincial Fire Prevention Branch.

b. Boilers Branch

- Installation of required safety devices. Prior approval of plans not required by the Boilers Branch; however, the Boilers Branch instructions to owners (Form 1709-16) must accompany the application

c. Gas Protection Branch

- Modifications of existing installations to meet current safety requirements

d. Electrical Protection Branch

- Modifications of existing installations to meet current safety requirements

e. Plumbing Inspection Branch

- Modifications of existing installations to meet current safety requirements

f. Occupational Health and Safety

- Enlargement of existing installations to meet current safety requirements

Not Supported Are:

- Repairs and maintenance of dust collectors, appliances and small equipment
- Minor breaches
- Modification of duct work

g. Alberta Building Standards

(i) Control of Asbestos:

If asbestos material is identified and exposure is likely to occur, corrective action should be taken. The presence of asbestos-containing material should be reported to R. N. Massiah, Head, Field Services, Building Standards Branch, 707, 10808 - 99 Avenue, Edmonton (427-8265). An inspector from the Building Standards Branch will visit the school and make a written recommendation on which course of corrective action should be taken. Application with plan of correction and cost estimates should be submitted to School Buildings Services Branch if financial support is anticipated.

5. BUSINESS EDUCATION EQUIPMENT

A. ELEMENTARY AND JUNIOR HIGH SCHOOL COMPUTER PROJECT

A limited number of computers for instructional purposes for grades 1-9, will be provided. The funding will be based on a 50/50 cost-sharing formula between Alberta Education and school jurisdictions. This project will extend over a three-year period. The funding will be $15.00 per eligible pupil in grades 1-9, based on the September 30, 1983 enrolment.

B. SENIOR HIGH SCHOOL BUSINESS EDUCATION EQUIPMENT UPGRADING

Business Education Equipment Upgrading will be spaced over a three-year period. It will be funded on a 50/50 cost-sharing formula between Alberta Education and local school jurisdictions. The allocation of grants will be based on the percentage of eligible senior high school students served in Business Education by laboratory course.

The funding will be approximately $365.00 per eligible student registered in Senior High School Business Education laboratory courses.

Provisions for electrical upgrading to be considered under category 3 (electrical).

6. ENERGY CONSERVATION MEASURES (Items that qualify under other specific categories will not be considered under this category.)

- insulation of hot water or steam piping and hot air ducts
- addition of a second set of doors to form a vestibule entrance
- installation of low leakage fresh air dampers
- installation of water saving devices on urinals
- installation of timer devices for automatic on/off control of equipment
- installation of outdoor temperature sensors for override control of equipment
- installation of controls to reset air or hot water temperature for boilers and fans
- installation of load analyzer controls to control equipment operation
- installation of day/night setback thermostats
- addition of control valves on hot water or steam distribution systems
- addition of switches or photocells for separate or multilevel lighting control
- installation of suspended ceiling fans in high ceiling areas
- installation of time and temperature controls for parking plugs
- insulation in attic type roofs*
- installation of air or liquid type heat recovery system to remove exhaust air heat and transfer to incoming fresh air*
- installation of a computerized energy management system to provide demand limiting and other functions not available using conventional controls**

Not Supported Are:

- infrared thermographic scans
- roof insulation and exterior wall insulation (see Category No. 1.)
- weatherstripping
- caulking
- solar film for windows
- three-phase power distribution
- power factor correction capacitors
- water savers on showers and faucets

Age Factor - Minimum age 7 years
- Over 7 years, at equity support

* Design report required from the regional energy consultant or engineering consultant, indicating the expected payback period.

** Limited to high school exceeding 5000 square meters gross area and a maximum support level of $1.00 per square meter. List schools in order of priority.

7. OTHER APPROVED MINISTERIAL PROGRAMS

This category is included to accommodate specific projects or programs that may be added during the year.

BQRP-A-86
Form C
C

Appendix "A"

BQRP

APPLICATION FORM

Submit Application Forms and All Related Material in Duplicate. Please refer to Instructions on the Back of this page

PROGRAM YEAR 19_____

SCHOOL JURISDICTION ______________________________ NO.______________

SCHOOL NAME ______________________________ LOCATION______________

Sch. Board Priority Number	BQRP Category	Proposal (Specific details required)	Age of * Construction	Cost Estimate
			Total	$

Secretary-Treasurer______________________ Date ______________ 19________

* Age of that section of building in which the proposed project is being considered, or year that this component last received funds under a similar BQRP.

Forward applications and all related material to: Program Coordinator School Buildings Services Branch.

Contact Person ____________________ Phone No.____________________

Appendix "B"

Application Procedures

INSTRUCTIONS

1. Applications to be submitted in metric. (School Board to provide all necessary measurements.)
2. Append in duplicate any details that may assist the School Buildings Board in fully understanding the proposal.
3. Sketch Plans of the entire school showing area involved must be attached.
4. Submissions under Category 1 (b) must be identified on an elevation of the area(s) involved.
5. Submissions under Category 4 must be documented by the pertinent Provincial Code Authority.
6. Complete cost estimate details to be appended to the application form.
7. Roof applications must be accompanied by a Roofing Consultant's (not roofer) Report.

NOTE: Submissions not completed in detail will be returned and reapplication may be made in the following year.

Enquiries about any of the programs may be directed to:

General - Fiore Berlin

Energy - David Cousins

Code - Trevor Gough

Construction Inspectors

William Belous

Jim Johnson

Trevor Gough

Ed. Pardely

All the staff members listed may be contacted at 427-2973.

Appendix "C" BQRP-S-86

YEARLY SUMMARY SHEET

Submit Summary Sheet and All Related Material in Duplicate. Please refer to Instructions on the Back of this page

PROGRAM YEAR 19____

SCHOOL JURISDICTION ______________________________ NO.______________

SCHOOL BOARD USE (Complete All Columns) Dept. Use Only

School Name (List Alphabetically)	Identification of Project	Overall Local Priority	Provincial Priority	Estimated Government Support	Estimated Local Cost	Total	Meets Priority	Estimated Government Support*
Sub-totals for this sheet				$	$	$		$
Total for Your Jurisdiction (last sheet)				$	$	$		$

School Board Motion: (Please Quote)

Secretary-Treasurer ______________________ Date __________ 19__

* For budget purposes only. Official recognition must be received from the School Buildings Board before commencing the project.

Contact Person ____________________ Phone No.____________________

APPENDIX "D"

Instructions for Completing Yearly Summary Sheet

This summary sheet will be reviewed by Branch personnel and returned with the columns "for Department use only" filled in. The School Board can then use this information for budget purposes.

It should be noted that official recognition of need must be received from the School Buildings Board before commencing work, as projects that are identified as meeting the priority list may be eliminated for other reasons.

FORMULA FOR ESTIMATING THE LEVEL OF GOVERNMENT SUPPORT

$ ______	x	______	x	______	=	$ ______
School Board Estimate Including Consultant's Fees		Age Factor When Applicable		Equity Factor		Maximum Support

Calculation of Age Factor

- The age of this section of building or the age this project last received BQRP support divided by the age factor as specified under the specific category. This figure will not exceed one.

Calculation of the Equity Factor (1 - 0.15e)

- District Equalized Assessment per Resident Pupil
- Provincial Equalized Assessment per Resident Pupil
- e (District assessment divided by Provincial assessment)
- Equity Factor = (1 - 0.15e)

The Equity Factor will not be less than .85 or more than .97.

Should clarification be required in completing this form, please contact Mr. Fiore Berlin, Program Coordinator at 427-2973 in Edmonton.

APPENDIX "E"

DISTANCE (BY AIR) ALLOWANCES FOR BQRP SUPPORT PRICES

0 - 40 kilometres	0% increase
41 - 120 kilometres	4%
121 - 200 kilometres	8%
201 - 280 kilometres	12%
281 - 360 kilometres	16%
Over 360 kilometres	20%

ADDRESSES OF FIRE PREVENTION BRANCH REGIONAL OFFICES

The regions are as follows:

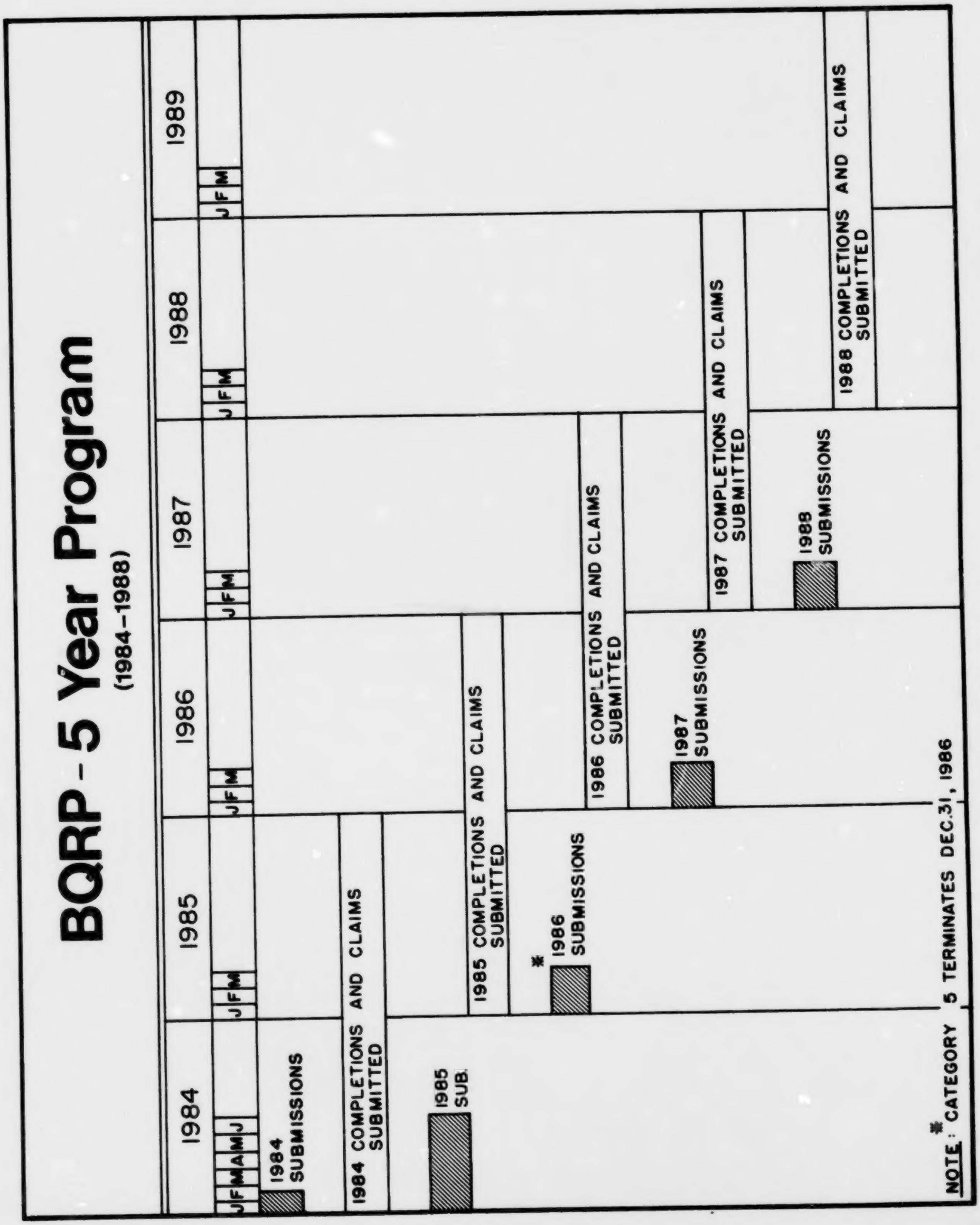
All area North of and including
- County of Parkland
- County of Strathcona
- County of Beaver
- County of Minburn
- County of Vermilion River
- City of Edmonton

Mr. George Musa
Alberta Labour
Fire Prevention Branch
303 Princeton Place
10339 - 124 Street
EDMONTON, Alberta
T5N 3W1 (427 4853)

All areas South of and including
- County of Wetaskiwin
- County of Camrose
- County of Flagstaff
- Wainwright School Division

Mr. D. Thomas
General Safety Services Division
Fire Prevention Branch
Deerfoot Junction Tower #3
#200 1212 - 31 Avenue NE
CALGARY, Alberta
T2E 7S8
(230-4710)

APPENDIX "F"


BQRP - 5 Year Program
(1984-1988)
1984
1985
1986
1987
1988
1989
J F M A M J
J F M
J F M
J F M
J F M
J F M
1984 SUBMISSIONS
1984 COMPLETIONS AND CLAIMS SUBMITTED
1985 SUB.
1985 COMPLETIONS AND CLAIMS SUBMITTED
* 1986 SUBMISSIONS
1986 COMPLETIONS AND CLAIMS SUBMITTED
1987 SUBMISSIONS
1987 COMPLETIONS AND CLAIMS SUBMITTED
1988 SUBMISSIONS
1988 COMPLETIONS AND CLAIMS SUBMITTED
NOTE: * CATEGORY 5 TERMINATES DEC.31, 1986

APPENDIX "G"

To: Director of Finance
and Administrative Services
Alberta Education
Devonian Building
11160 - Jasper Avenue
EDMONTON, Alberta
T5K 0L2

Form A0304-BQRP(A)-81

APPLICATION FOR BQRP ADVANCES

(Submit only one form for each quarter)

Following is a list of 19___ projects approved under the Building Quality Restoration Program for which we are applying for an advance.

Project No. Per Recognition of Need	School Name	Estimated Supported Amount Per Recognition of Need	Date Work Commenced on Project

This advance is for the quarter (check one)

April 1 to June 30, 19___
July 1 to Sept. 30, 19___
Oct. 1 to Dec. 31, 19___
Jan. 1 to March 31, 19___

I ____________________ of ____________________
(Signature of Secretary-Treasurer) (Name of School Jurisdiction)

solemnly declare that work has commenced on the above noted projects, and I make this declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath.

1984 - 1988 SCHOOL CAPITAL FUNDING PLAN

School Buildings Services
Alberta Education
11160 - Jasper Avenue
Edmonton, Alberta
T5K 0L2

April, 1984

SCHOOL CAPITAL PLAN

1984 - 1988 School Capital Funding Plan

SECTION **PAGE**

Background 1
Trends in Enrolments and School Construction (1970 - 1983) Figure 1 2
The 1979 - 1983 School Capital Funding Plan 3
  Funding Formula 3
  Equity Factor (E) 3
  Utilization Factor (U) 3
  Approved Area Factor (A) 4
  Jurisdictional Profile of Capacities, Exemptions and Enrolments (Table 1) 5
  Support Factor (S) 6

1984 - 1988 School Capital Funding Plan 6
  Criteria for New Plan 6
  Total School Construction Inventory (Figure 2) 7
  Funding Formula Adjustments 8
  Modernization 8
  Priority System 8
  The Approval Process 9

1984 - 1988 Building Quality Restoration Program (BQRP) 10
  Criteria for BQRP 10
  BQRP Priorities 10
  BQRP Funding Formula 10
  Control Procedures for BQRP 10

Summary 11

1984-88 SCHOOL CAPITAL FUNDING PLAN

BACKGROUND

The Province of Alberta is organized into 137 active and autonomous school jurisdictions: 91 public school jurisdictions and 46 Roman Catholic school jurisdictions. All jurisdictions receive similar provincial grants for operating schools and funding for capital projects. The provincial share of capital funding, which occurs by way of debenture payments, varies from 60 to 80 percent. As a consequence, the local burden for capital expenditures is in the range of 20 to 40 percent of construction costs. This infusion of large amounts of provincial funding into school facilities has resulted in many of these local and autonomous school jurisdictions undertaking extensive building programs, with limited impact on local property taxes but not without impact on the total financing of education in Alberta. More than forty percent of the approved increase to Alberta Education's operating budget in the 1983-84 budget year was allocated to debenture servicing. This means that every school jurisdiction feels the impact of extensive building.

The flurry of school building that was typical across the continent in the 1960's continued unabated in Alberta into the late 70's. The provincial mechanisms in place during the 1960's and 70's for approving and funding schools seemed to have limited effect in curbing the rapid rate of building. There was little evidence of careful long-range planning on the part of jurisdictions or the province. Each project proposed by a jurisdiction was justified, reviewed and approved by the province on an individualized basis.

The result was that by 1979, when a new school capital funding plan was introduced, there were spaces in Alberta schools for 600,000 pupils and only 420,000 enrolments. Since 1979, enrolments have increased only slightly but 75,000 additional pupil spaces have been built. Figure 1 describes the extent of building during the late 70's and early 80's. A reasonable inventory of pupil spaces (shown by the dotted curve in Figure 1), which was the norm in the early 70's, has been far surpassed in recent years.

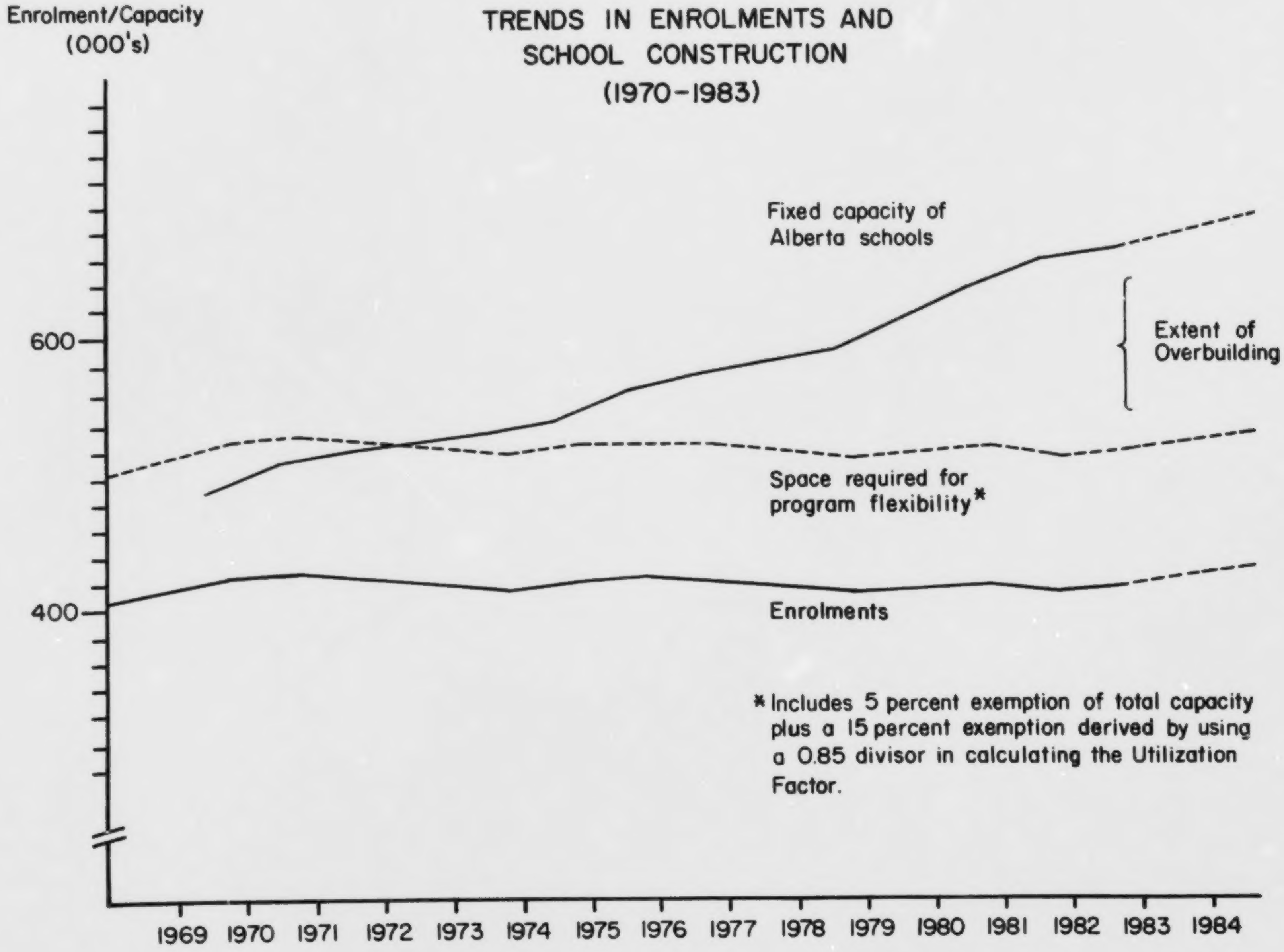
There are some things that must be said about this current state of affairs. First, not all of the excess space is located in areas where there is a great need for space. This is especially true in many areas of rural Alberta. Second, Alberta now has some of the finest new facilities to be found on the continent. Indeed, our core schools, energy efficient schools, earth-sheltered schools, and schools designed for conversion to other uses are the focus of much international interest and acclaim. Even some of our older schools which have been upgraded through BQRP and modernization now serve as lighthouse projects.

The active building program over the past five years has been as a result of a number of converging conditions. Migration into the province, as well as significant internal migration or mobility, has resulted in pockets of students where school spaces were scarce or non-existent. As a result of this demand and coupled with a buoyant economy, a strong belief in neighborhood schools, and because of a fairly generous and open-ended capital funding plan, many new schools were built. These conditions have since changed.

Several factors pointed to the need for a revised capital funding plan to replace the one introduced in 1979. First, that capital funding plan expired on December 31, 1983. Second, the rate of new construction over the past five years has increased

Figure 1

TRENDS IN ENROLMENTS AND SCHOOL CONSTRUCTION (1970-1983)



* Includes 5 percent exemption of total capacity plus a 15 percent exemption derived by using a 0.85 divisor in calculating the Utilization Factor.

debenture costs significantly. Third, because school jurisdiction decisions made at the local level have a province-wide impact, school jurisdiction planning must be able to fit into the provincial context. Finally, unlike the 1979-83 period, the current economic conditions and current patterns of migration are such that extensive overbuilding of schools space cannot, and need not, be continued.

THE 1979-83 SCHOOL CAPITAL FUNDING PLAN

The capital funding plan that was introduced on January 1, 1979 had several features that were different from previous practices. School jurisdictions were required to submit three-year capital plans to the provincial planners for approval and funding. These plans had to reflect local planning and priorities and had to include enrolment projections for at least five years.

Funding under this plan was determined by a formula which included factors to adjust for financial equity, jurisdiction utilization of space, approved areas, and changes in construction costs. Simply defined, the funding formula was of the following form:

$$P = E \times U \times A \times S$$

where: P is the provincial support for the project,

E is the equity factor,

U is the utilization factor,

A is the approved area factor, and

S is the support factor which includes adjustments for inflation and distance.

A more detailed discussion of these four factors follows.

Equity Factor (E)

The Equity Factor (E) is calculated by the following formula:

$$E = 1 - 0.15(e)$$

where: e is the local equalized assessment per resident pupil divided by the average provincial equalized assessment per pupil.

The Equity Factor (E) is calculated by the above formula and limited to a range of 0.85 to 0.97. In other words, the wealthiest jurisdiction could expect 85 percent support for a capital project while a poor jurisdiction could qualify for 97 percent support for a similar project under this factor.

Utilization Factor (U)

The Utilization Factor (U) is designed to encourage jurisdictions to carefully plan for additional space requirements and it does this by penalizing them if they undertake projects while they have excess or underutilized space. The Utilization Factor is calculated as follows:

$$U = u \div 0.85$$

where: u is the enrolment of the system divided by the system operational capacity (i.e. the system fixed capacity less allowable exemptions).

In practice U is allowed to vary in the range of 1.00 or less. The 0.85 divisor used in the formula has proven to be a useful figure in planning inasmuch as it provides for flexibility in terms of space. For example, if a school has a fixed capacity of 525 pupils and an operational capacity of 500 pupils, U becomes 1.00 when the enrolment reaches 425.

$$U = 425/500 \div 0.85 = 1.00$$

and the jurisdiction qualifies for maximum support on its next project under the Utilization Factor. The difference between the 525 fixed capacity and the 425 practical, or enrolment, capacity (100 pupil spaces) is intended for flexibility. In Alberta where classrooms are designed for 25 pupils it means that in the above example, four classrooms are available to accommodate smaller class sizes or other programming considerations.

Over the past five-year period, the funding formula was adjusted to provide greater financial support to school jurisdictions. The results of these adjustments are shown as exemptions of space in Table 1. More than 231,000 pupil spaces have been exempt for various reasons. It now appears that, rather than continue using exempt spaces, many school jurisdictions have used the reduced operational capacities as an indicator of need to build new space.

Approved Area Factor (A)

While many school jurisdictions seek to overbuild by providing larger than necessary facilities, Alberta Education has developed a set of guidelines recommending areas for most instructional and non-instructional spaces. These guidelines are available to educational facility planners across the province. When it comes to approving areas, Alberta Education relies on a gross area for a given capacity. It is left to the ingenuity of the architect to design around this figure although the gross area is large enough to accommodate all of the specifications in the published area guidelines.

The Area Factor (A) is calculated by multiplying the planned capacity of a school by the approved area per pupil.

Depending on the type of school and the planned capacity, approved areas vary. Several examples are drawn from current regulations:

2000 pupil composite high school	9.37 m^2/pupil
500 pupil academic high school	9.90 m^2/pupil
500 pupil junior high school	8.54 m^2/pupil
300 pupil permanent elementary school	7.57 m^2/pupil
300 pupil core elementary school*	9.92 m^2/pupil
150 pupil portable section of core school*	4.00 m^2/pupil

*When combined into a typical core-portable configuration the result is 7.95 m^2/pupil, i.e., 3576 m^2 to accommodate 450 pupils.

Table 1

JURISDICTIONAL PROFILE OF CAPACITIES, EXEMPTIONS AND ENROLMENTS

		EXEMPTIONS[1]									
	Fixed Capacity	Age	Classroom	"U Factor"[2]	3 - Year	Leases	Disposals	Special Education	Other[3]	Operational Capacity	Enrolment (Sept. '82)
Counties	128,760	6,905	10,220	14,880	9,865	550	2,955	145	630	82,610	84,319
Divisions	102,645	3,920	8,225	11,824	9,825	350	2,900	30	1,480	64,091	67,003
Catholic Districts	115,995	3,575	8,200	13,013	15,020	4,020	175	---	995	70,997	73,738
Public Districts	305,320	24,045	17,650	33,622	18,300	1,745	375	75	3,405	206,103	190,523
Special Districts	8,080	75	525	1,098	745	---	---	270	125	5,242	6,224
Province	660,800	38,520	44,820	74,437	53,755	6,665	6,405	520	6,635	429,043	421,807
Percent of Fixed	100.0%	5.8%	6.8%	11.3%	8.1%	1.0%	1.0%	0.1%	1.0%	64.9%	

[1] Effective December 10, 1982

[2] Calculated (Enrolment ÷ .85) - Enrolment

[3] Includes: spaces built without provincial funding, district offices, administration offices. ESL programs, district compensatory funded programs, and supportive student services.

Areas included in the design beyond the approved areas must be funded locally, with no provincial support. Sometimes this is the case when local agencies enter into joint-use agreements with the school jurisdiction. An example might be the added space required for a community-use swimming pool as part of a high school complex.

Support Factor (S)

The Support Factor (S) is meant to reflect the true costs of construction in any given period of time. To ensure close tracking of actual costs, quantity surveys are carried out and used as a basis for setting support rates and distance allowances on a periodic basis. When actual tender or bid prices are below the estimated Support Factor, the actual project costs are used in the formula.

Overall the effect of the funding formula is to give each jurisdiction an opportunity to optimize its position through the effects of the Utilization Factor and to enable them to obtain the largest possible share of the support available after the Equity Factor is applied. The Equity Factor itself operates beyond the parameters under control by the local jurisdictions inasmuch as it is based on provincial average assessments.

So that the effects of planning can be allowed to fully materialize, a three-year delay is incorporated between the date of the Minister's approval of the tender or bid on the project and the date when final support is calculated and the provincial and local shares of the debenture costs are determined.

1984-88 SCHOOL CAPITAL FUNDING PLAN

The new school capital funding plan reflects changes in both process and outcomes. The previous plan was structurally sound in that it contained factors contributing to financial equity, efficiency and long-range planning. The new plan retains these structural factors, and adds to them, a more rigorous determination of need and the setting of local and provincial priorities. Another significant change is the reduction of pupil place exemptions from around 231,000 to approximately 100,000. Finally, because so much school space is twenty-five years old, or older (see Figure 2), and because so much of this space is in urban areas where it could be used, modernization is included as a part of the new plan. The intent is that modernized space can provide an alternative to constructing new space in many cases.

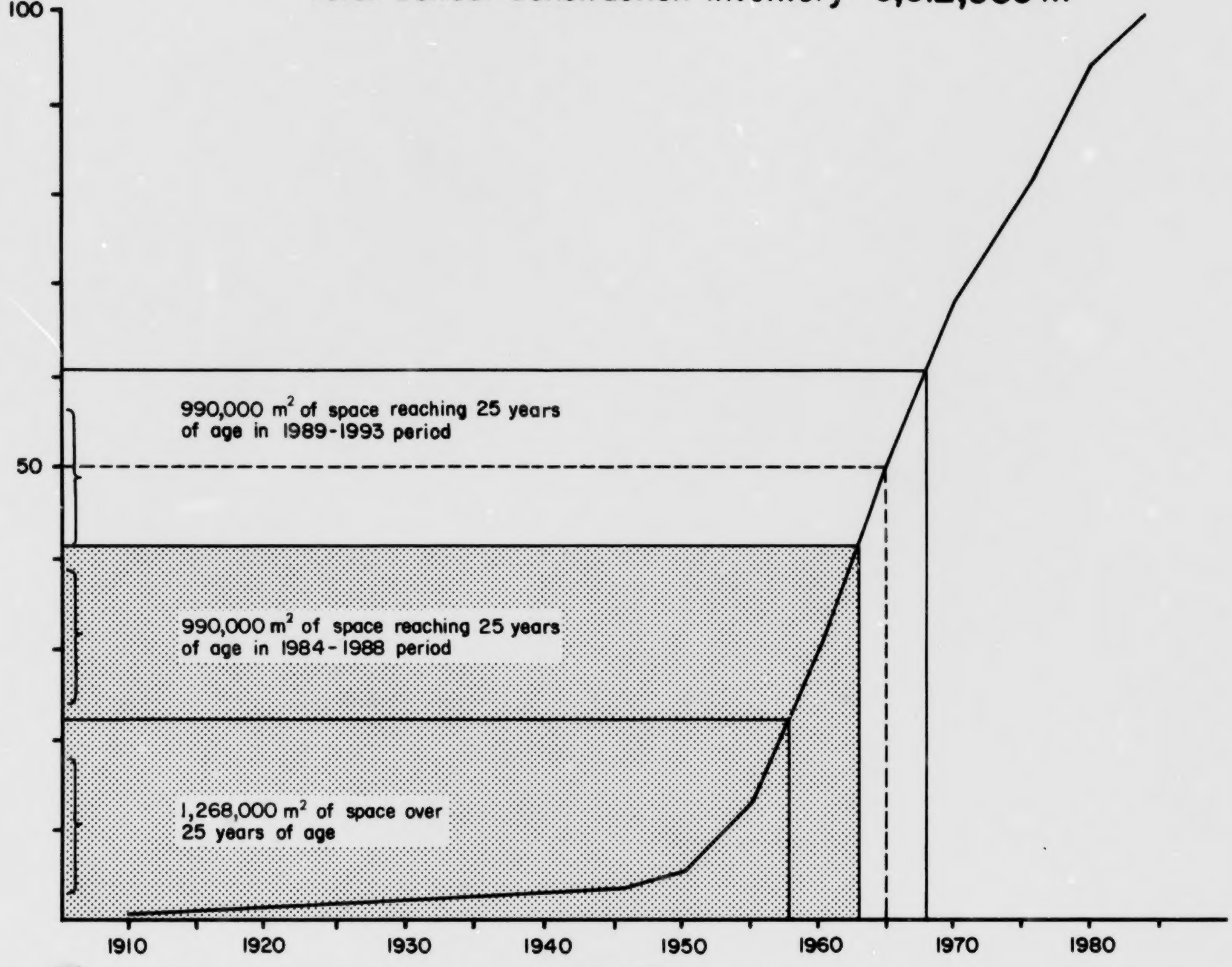
The overall intent of the new plan is to bring the inventory of usable pupil spaces more into line with the current enrolment levels.

Criteria for New Plan

The 1984-88 School Capital Funding Plan is designed to meet several criteria. Specifically, the intention for the plan is to foster: local planning which can yield local outcomes compatible with provincial priorities; financial equity; maximum utilization of existing school space; provision of new space where no space is available and where other alternatives do not exist; provision of upgraded space where current educational program demands outstrip the capabilities of existing facilities; re-use of excess school space; community use; and the provision of space for elementary children as near to their homes as possible.

Figure 2

Total School Construction Inventory - 5,512,589 m^2



Funding Formula Adjustments

Largely as a result of the exemptions of more than 231,000 pupil spaces under the 1979-83 plan, the average utilization ratio for all jurisdictions was 98 percent and the Utilization Factor equated to 1.00. As a consequence, there were few incentives for good planning available to influence school jurisdictions in their decisions regarding providing of school facilities. To remedy the situation, the exemptions were changed to allow only a five percent exemption plus the effect of the 0.85 divisor in calculating the Utilization Factor. Approved leases of space for government agencies and community use continue to qualify for exemption. The net level of exemptions is equivalent to one exempt pupil space for every four pupils. No exemptions are allowed for age. New space is added to capacity counts one year after the tender has been approved by the Minister.

Modernization

During the 1979-83 period modernization was included as a category of the Building Quality Restoration Program (BQRP). Under the new School Capital Funding Plan, modernization is included as an alternative to new construction. Much of the new construction currently takes place in urban areas and within easy travelling distances from older but poorly utilized schools. The intent of the new plan is that these older schools should be modernized (if required) and used to accommodate more transported students. Modernization is also an important factor in the new plan for two additional reasons. First, as shown in Figure 2, more than 40 percent of the school space in Alberta will reach an age of 25 years or older in the next five year period. This space needs to be upgraded to meet current educational program requirements and to protect the substantial investment already made. Second, research indicates that 2/3 of one percent of the replacement costs of school buildings should be earmarked annually for major realignment or remodeling of schools.

To increase the feasibility of using modernized space in lieu of new construction, school jurisdictions will receive an increase in their transportation grant equal to the number of additional students they transport as a result of a modernization project.

Priority System

To meet the criteria for capital funding, the following set of priorities is in effect:

> First priority will be given to those cases where the health or safety of children is at stake. These projects will include modernization and replacements.
>
> Second priority will include: space requirements when space is unavailable and transportation to other space is not feasible, or modernization of existing space in lieu of new construction.
>
> Third priority will be assigned to facility needs resulting from mandated changes to the educational program required by Alberta Education.

Fourth priority will be assigned to facility requirements arising from obsolescence, e.g., the facilities can no longer accommodate the current educational program. Facility requirements in this category will most often be for modernization.

Fifth priority will be assigned to projects designed to facilitate community use.

Sixth priority will be assigned to neighborhood schools.

Lowest priority will be accorded to requests for space where other nearby space could suffice and/or transportation is feasible.

The Approval Process

The following procedures outline the 1984-88 School Capital Funding Plan for approval of capital projects (new construction, additions and modernization).

1. School jurisdictions will submit three-year capital plans with five-year enrolment projections. Projects for each year will be ranked in terms of local priority. These capital plans will be updated and resubmitted annually. The submissions will be received up to the following cutoff dates:

1984 projects	15 February 1984
1985 projects	30 June 1984
Subsequent years	31 March in preceding year

2. Once received, the jurisdictions' capital plans will be reviewed and prioritized (see above) by School Buildings Services Branch and Regional Office personnel. An integrated provincial capital plan will be developed, costed, and submitted to the School Buildings Board for approval.

   To ensure that emergencies (projects that could not be predicted and included in capital plans) can be funded without delay, a contingency fund will be maintained.

3. The School Buildings Board will approve the highest priority projects to the extent coverable by the capital funding available in any year. Projects not approved in any year may be added to the jurisdictions' capital plans for consideration in subsequent years.

4. Support for capital projects will be based on an Equity Factor, a Utilization Factor, the approved area of the projects, and a support price reflecting current economic conditions.

These procedures are used because they provide for the shortest planning time (some provinces expend up to five years between jurisdiction application for approval and project completion) and they offer simplicity.

When a modernization project proposal is found that fits better into a BQRP category, it will be transferred to the BQRP with permission of the jurisdiction. When a modernization project fails to receive funding in any year because of low priority, and when it contains an element or elements that would normally be considered under BQRP guidelines, the jurisdiction will be given 30 days to resubmit the project for consideration as a BQRP project in the current year. Alternatively, the jurisdiction may choose to resubmit the project as either a modernization or BQRP project in the next planning cycle.

1984-88 BUILDING QUALITY RESTORATION PROGRAM (BQRP)

The previous BQRP included several components: structural, mechanical, electrical, codes, vocational education equipment, modernization, aesthetic upgrading, site improvement, and special projects approved by the Minister.

A recent study and review of the BQRP indicated that the basic program structure was acceptable to school jurisdictions across the province. The changes in the 1984-88 BQRP are intended to focus the use of available resources into the highest provincial priorities.

Criteria for BQRP

The basic parameters of the 1984-88 BQRP have remained relatively unchanged. The new BQRP has been designed to meet specific criteria: to remediate failure of building components; to preserve the capital investment already made in school facilities; to ensure usefulness, healthfulness and safety of school facilities; and to foster energy conservation in schools.

BQRP Priorities

First priority will be given to projects designed to remediate health, safety or acute structural deficiencies in school buildings.

To ensure that other provincial priorities shall be met, some funds will be earmarked for special purposes such as energy conservation, Business Education equipment upgrading and ministerially approved special projects.

Second priority will be given to projects designed to overcome immediate needs to preserve the quality of school buildings. Projects could include mechanical systems, electrical systems, codes and structural deficiencies.

Third priority will be given to projects designed to improve the quality of electrical and mechanical components, and the aesthetics or architectural finishes of school facilities.

BQRP Funding Formula

In the past, BQRP projects have been funded at 80 percent of approved or actual costs, whichever was lower, and adjusted by Age Factors. In the new program funding will be based on an Equity Factor (the same as for new construction) and an Age Factor.

Control Procedures for BQRP

The following procedures shall be followed in the BQR Program.

1. School boards will be required to submit annual project plans,

for each year, to the department. These may be submitted at any time up to the following cutoff dates:

1984 projects	15 February 1984
1985 projects	30 June 1984
Subsequent years	31 March in preceding yea

2. Upon receipt, these projects will be reviewed, costed, and a priority classification assigned.

3. Prioritized lists of projects will be submitted to the School Buildings Board for approval. Within two months after the cutoff date the School Buildings Board will determine which projects can be approved and funded and school boards will be notified.

4. Project funding will be calculated by using an Equity Factor, an Age Factor and the estimated or actual cost of the project (whichever is lower).

These procedures are based on recent studies of the BQRP and take into consideration the time required to approve projects intended for completion during the months of July and August in each year.

SUMMARY

To those who are already involved in school facility planning, the new programs appear familiar although they contain several significant changes. The newer facility planners should understand that the capital funding plan that was introduced in 1979 has served Albertans well. The changes in this plan are intended to provide more equity among school districts and to ensure that the most needed facilities requirements are funded first. This is especially important during this current period of economic restraint. The most significant changes included in this plan are: 1) changes to the space exemptions in order to bring all districts into the operating range of the Utilization Factor of the funding formula; 2) consideration of modernization in lieu of new construction as a way of reducing some of the excess space inventory currently on hand; 3) development of a planning mechanism that will more closely link local planning with provincial planning and priorities; 4) requirement for capital plans describing BQRP projects; 5) inclusion of an Equity Factor in the funding formula for BQRP; and 6) an increase in a school jurisdiction's transportation grant equal to the number of additional students transported as a result of a modernization project.

ESTABLISHING THE TOTAL AND OPERATIONAL CAPACITY OF ALL SCHOOLS IN A JURISDICTION

CAPACITY EXEMPTIONS

Establishing the Total and Operational Capacity of All Schools in a Jurisdiction

SECTION **PAGE**

Exemptions for: 1

Leases Approved by the Minister 1
Special Education Classrooms 1
English As A Second Language 1
Other Uses . . . . .

Guidelines for Capacity Adjustments for Students Withdrawn From A Jurisdiction 1

ESTABLISHING THE TOTAL AND OPERATIONAL CAPACITY OF ALL SCHOOLS IN A JURISDICTION

1. The school board will submit school board resolution requesting exemptions for:

   a. Leases approved by the Minister for non-profit registered charitable organizations, service clubs, cultural groups, community use, handicraft guilds, Municipal, Federal or Provincial government use, youth organizations such as Air Cadets, Guides, Boys and Girls Scouts, etc., community playschools and nursery schools, and privately operated Early Childhood Services classrooms. It should be noted that prior to January 1, 1984, E.C.S. classrooms were not exempted, but the full-time-equivalent E.C.S. enrolments were added to the jurisdiction's total. Now the classroom space is exempted if an approved lease agreement is submitted. (See Interim Policy and Guidelines Use of Vacant School Space in Section 4.)

   b. Special Education classrooms for a reduction in capacity from 25 to 10 student places. Apply for this exemption by sending a list of schools and number of Special Education classrooms in each school. There must be a minimum of two Special Education classrooms per school in order to receive this reduction.

   c. Rooms for English as a Second Language Program, English for New Canadians Program, Continuing Education Academic Programs (both school age and adult).

   d. Other uses such as area offices, decentralized administration, and other district uses. These exemptions must be applied for and approved on an individual basis.

2. The school board may submit a request for capacity adjustments for students withdrawn from a jurisdiction in accordance with the following policy guidelines:

   a. The total capacity of the schools from a school jurisdiction having students withdrawn will be reduced by the number of students withdrawn (rounded off to the nearest multiple of 5) or the number of students established in a capital agreement, whichever is the greater.

   b. The capacity withdrawn will be allocated to the school board withdrawing these students, when it constructs new instructional areas.

   c. The number of student places assigned to the school board withdrawing students will remain with that jurisdiction until the enrolment of school(s) from which students were withdrawn, equals or exceeds pre-withdrawal enrolments. The exemption will be reviewed and may be adjusted on September 30th of each year.

d. When the school board withdrawing the students, purchases or leases existing building space equivalent to, or larger than the exemption, the board will assume the capacity of the building and the school board losing the students will receive an exemption for the space transferred.

3. The School Buildings Services Branch will account for the exemptions of capacity changes resulting from new construction and/or modernization. The exemptions will be in effect for one year after the date the Minister or his designate approves a tender or a scheme of construction.

4. A final exemption of a 5% reduction in the net capacity for flexibility in program implementation will be calculated as follows:

Jurisdictions Total Capacity minus Leases and Other Exemptions = NET CAPACITY

NET CAPACITY x .95% (rounded off to the nearest multiple of 5) = OPERATIONAL CAPACITY (of the school jurisdiction)

OPERATIONAL INFORMATION ON
THE SCHOOL BUILDINGS SERVICES BRANCH
and
THE SCHOOL BUILDINGS BOARD

SCHOOL BUILDINGS SERVICES

Operational Information on the School Buildings Services Branch and the School Buildings Board

SECTION **PAGE**

School Buildings Services Branch

- Personnel 1
- Purposes 2
- An Overview of Responsibilities and Services 2
  - Regulatory 2
  - School Buildings Board 2
  - Consultative, Advisory and Support Services 3
  - Field Work 3
  - Special Programs 3
  - Surveys 3
  - Resource Personnel 3
- School Buildings Board 4
  - Composition 4
  - Authority 4
  - Meetings 4
  - Services 4

I. SCHOOL BUILDINGS SERVICES BRANCH Telephone: 427 - 2973

A. Personnel

John W. Kulba, Director
Lynn Duff, Office Supervisor

Marian Weleschuk, Associate Director, Administration
Lana Hlady, Secretary to the Associate Director, Administration

Hoang Le, Associate Director, Policy, Planning and Technical Services
Vacant, Secretary to the Associate Director, Policy, Planning and Technical Services and Engineer II

Ron Ross, Engineer II

Rob Fiedler, Planning Officer
Debbie Stelter, Receptionist and Secretary to the Planning Officer
Dorothy Thomas, Research Clerk

Eleanor Chernenkoff, Research Assistant

Lynn S. Grant, Co-ordinator and Secretary, School Buildings Board
Clarence Osinchuk, Administrative Officer
Nancy Mah, Secretary to the Co-ordinator and Secretary and Administrative Officer

Allan Phillips, Technologist IV, Plans Examiner
Larry Wilson, Technologist IV, Plans Examiner
Al Wilson, Technologist II, Project Space Draftsman
Esther Kubica, Secretary to the Plans Examiners, Draftsmen and B.Q.R.P.

Fiore Berlin, Program Co-ordinator
Karen Boyer, Secretary to Program Co-ordinator

William Belous, Construction Inspector
Ed Pardely, Construction Inspector
Jim Johnson, Construction Inspector
Trevor Gough, Construction Inspector
Harbans Sangha, Secretary to Construction Inspectors

David Cousins, Energy Project Director
Earldene Krys, Secretary to Energy Project Director

Doug Spratt, Energy Consultant, Grande Prairie R.O.E.	538 - 5130
Thomas Lo, Energy Consultant, Edmonton R.O.E.	427 - 2952
Vacant, Energy Consultant, Calgary R.O.E.	297 - 6353
Rick Pilling, Lethbridge R.O.E.	381 - 5243
Jay Forster, Energy Consultant	427 - 2973

SCHOOL BUILDINGS SERVICES BRANCH (Continued)

B. Purposes:

To assist school boards as autonomous corporate bodies to plan, build, operate, and maintain school buildings in order to facilitate the desired school program.

To enable school boards to access government support for educational facilities in accordance with provisions of The Alberta Act, The Department of Education Act, The School Act, The School Buildings Act, and other relevant statutes, and regulations pursuant thereto.

To provide a planning and information capability for the purpose of assisting departmental and local authorities in planning for the provision and utilization of school facilities.

C. An Overview of Responsibilities and Services:

1. Regulatory

This Branch administers the provisions of the School Buildings Regulations, pursuant to The School Buildings Act. Hence, it deals mainly with such things as building projects, architectural plans, eligibility for financial support, tenders, school facilities, day labor schemes, renovation and upgrading programs, facilities for special education and Early Childhood Services, and related matters.

2. School Buildings Board

The School Buildings Administration section co-ordinates and conducts activities concerning referrals to and decisions made by the School Buildings Board. Accordingly, school boards must contact this Branch if there are matters related to submissions or approvals (or refusals) by the Board.

3. Consultative, Advisory and Support Services

The Branch provides a very wide range of advisory services regarding facilities and related matters. Personnel in the Branch have a variety of backgrounds based in education, administration, engineering, and in trade and technical fields. When specific help cannot be given, every effort is made to indicate other sources of assistance. The Branch also has access to engineers and architects working with Public Works, Supply and Services.

. . 3

C. An Overview of Responsibilities and Services (Continued)

The Branch has implemented a computerized school facilities data system upon which other branches may draw. The data system and the services of a planner and engineers are available to school boards and government agencies concerned with school facility planning.

4. Field Work

Inspectors travel throughout the Province visiting schools and buildings or BQRP projects in progress. They will discuss matters when requested, and offer such advice, referral, or information as they can. Other members of the Branch on occasion do field work as duties permit.

5. Special Programs

The School Building Quality Restoration Program (B.Q.R.P.) is an example of this type of program. Guidelines were established to assist school boards in upgrading their school buildings where the failure of selected building components is involved. This program has greatly improved the general condition of school facilities throughout Alberta. The B.Q.R.P. will continue to emphasize safety, structural, mechanical, electrical and code components.

6. Surveys

The School Buildings Services Branch provides for facility evaluations, surveys, and other services to school boards and school board administrative personnel. Also, staff of the Engineering Services section will carry out cursory inspections and general assessments of building conditions as requested and scheduled.

7. Resource Personnel

The School Buildings Services Branch staff participates in workshops. An example is the annual workshop held by the School Plant Officials of Alberta.

There are no regularly scheduled seminars, but on occasion, these are arranged if and when timely topics arise. Also, Branch personnel do, on occasion, conduct sessions at zone meetings, seminars, and other organization activities.

. . 4

II. THE SCHOOL BUILDINGS BOARD

A. This Board has five members:

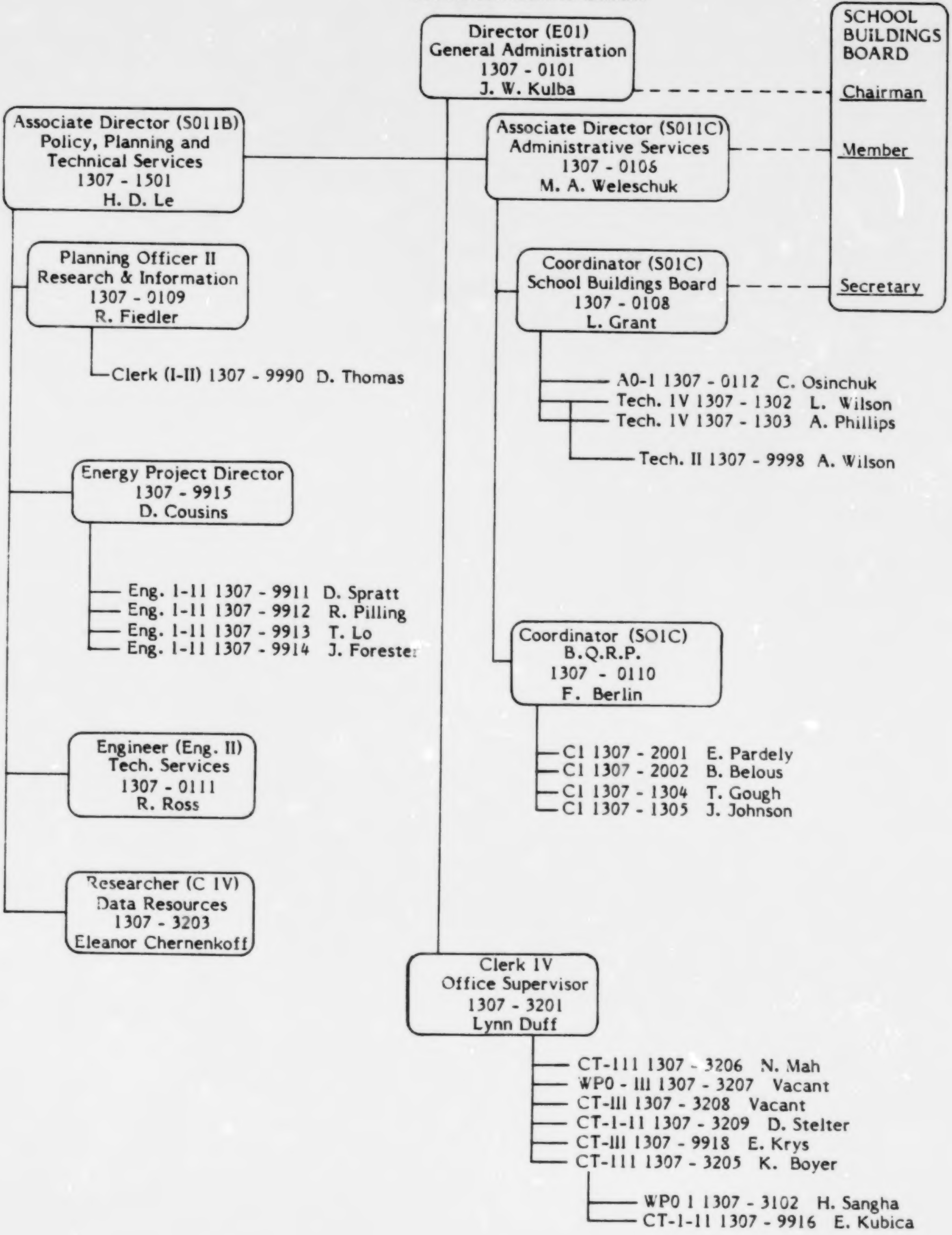
Director, School Buildings Services Branch, Chairman and member.
Associate Director, School Buildings Services Branch, member.
One member from Public Works, Supply and Services.
One member from Alberta Treasury.
One member from the Program Delivery Division.
Co-ordinator and Secretary.

B. The School Buildings Board is set up pursuant to provisions of The School Buildings Act, within limits set by regulations pursuant thereto (The School Buildings Regulation), and relates in function to Section 105 of The School Act.

C. The Board meets weekly insofar as possible to deal with written submissions by school boards. It does not meet with delegations because it does not interfere with the right of school boards to deal with education matters as corporate and autonomous bodies in their designated areas. The School Buildings Board may only deal with matters referred to it by school boards, and the submissions must be in written and documented form.

D. Administrative personnel of the School Buildings Services Branch will, upon request, meet with school board representatives and/or school board administrative personnel regarding projects, appeals, planning and other matters related to school facilities in lieu of meeting delegations.

SCHOOL BUILDINGS SERVICES BRANCH
ORGANIZATIONAL CHART


Director (E01)
General Administration
1307 - 0101
J. W. Kulba
SCHOOL BUILDINGS BOARD
Chairman
Member
Secretary
Associate Director (S011B)
Policy, Planning and Technical Services
1307 - 1501
H. D. Le
Associate Director (S011C)
Administrative Services
1307 - 0106
M. A. Weleschuk
Planning Officer II
Research & Information
1307 - 0109
R. Fiedler
Clerk (I-II) 1307 - 9990 D. Thomas
Coordinator (S01C)
School Buildings Board
1307 - 0108
L. Grant
A0-1 1307 - 0112 C. Osinchuk
Tech. IV 1307 - 1302 L. Wilson
Tech. IV 1307 - 1303 A. Phillips
Tech. II 1307 - 9998 A. Wilson
Energy Project Director
1307 - 9915
D. Cousins
Eng. 1-11 1307 - 9911 D. Spratt
Eng. 1-11 1307 - 9912 R. Pilling
Eng. 1-11 1307 - 9913 T. Lo
Eng. 1-11 1307 - 9914 J. Forester
Coordinator (S01C)
B.Q.R.P.
1307 - 0110
F. Berlin
C1 1307 - 2001 E. Pardely
C1 1307 - 2002 B. Belous
C1 1307 - 1304 T. Gough
C1 1307 - 1305 J. Johnson
Engineer (Eng. II)
Tech. Services
1307 - 0111
R. Ross
Researcher (C IV)
Data Resources
1307 - 3203
Eleanor Chernenkoff
Clerk IV
Office Supervisor
1307 - 3201
Lynn Duff
CT-111 1307 - 3206 N. Mah
WP0 - III 1307 - 3207 Vacant
CT-III 1307 - 3208 Vacant
CT-1-11 1307 - 3209 D. Stelter
CT-III 1307 - 9918 E. Krys
CT-111 1307 - 3205 K. Boyer
WP0 1 1307 - 3102 H. Sangha
CT-1-11 1307 - 9916 E. Kubica

FORMS

FORMS

SECTION PAGE

New Construction

Application Form for New Construction "A" 1
Summary of Projects on Form 1315-236 A & B 2
Statement of Final Costs 3
Statement of Eligible Costs 4
Final Statement of Eligible Costs 5

Modernization

School Modernization Application Form "B" . . . . 6&7
Summary of Projects on Form 1315-236 A & B 8
Statement of Final Costs 9
Final Inspection Report Form (To be done in conjunction with Statement of Final Costs) 10
Final Statement of Eligible Costs 11

Building Quality Restoration Program

BQRP Application Form . . . . 12&13
Yearly Summary Sheet . . . . 14&15
BQRP Claim Form . . . . 16&17

APPLICATION FORM FOR NEW CONSTRUCTION

ESTIMATED COST AND FUNDING BY PROJECT
FOR THE YEAR 19__ DATE __________ 19__

A

NAME OF JURISDICTION ______________________ NO ________

NAME OF DISTRICT ______________________ NO ________

____
SIGNATURE OF SECRETARY-TREASURER

	PAST ENROLMENTS (SEPT. 30)					PROJECTED ENROLMENTS				
	19	19	19	19	19	19	19	19	19	19
TOTAL JURISDICTON ENROLMENT										
% CHANGE										

NAME OF PROJECT ______________________________

PROJECT DESCRIPTION *

CAPACITY OF THIS PROJECT ☐

AREA OF THIS PROJECT ☐ m²

* ATTACH SMALL SCALE PLANS AND DESCRIBE PROPOSED BUILDING PROJECT IN DETAIL

A ESTIMATED PROJECT COST

LAND PURCHASE	$
SITE DEVELOPMENT	$
CONSTRUCTION CONTRACT	$
ARCHITECT'S FEES	$
FURNITURE AND EQUIPMENT	$
WATER AND SEWER	$
OTHER (SPECIFY)	$
______________	$
______________	$
______________	$
TOTAL ESTIMATED PROJECT COST	$

B ESTIMATED FINANCING BY SOURCE $P = E \times U \times A \times S$

ESTIMATED PROVINCIAL SUPPORT

EQUITY FACTOR		
UTILIZATION FACTOR		
AREA (m²)	m²	
SUPPORT LEVEL	$ /m²	
DISTANCE ALLOWANCE	$ /m²	
OTHER ALLOWANCE	$ /m²	
______________	$ /m²	
TOTAL ESTIMATED PROVINCIAL SUPPORT	$ /m²	$
LOCAL SUPPORT		$
OTHER SUPPORT		$
______________		$
TOTAL ESTIMATED PROJECT SUPPORT		$

TOTAL ESTIMATED COSTS (SECTION A) MUST EQUAL TOTAL ESTIMATED SUPPORT (SECTION B)

NAME OF SCHOOL ______________________

ADDRESS ______________________

SPECIFY SCHOOL BOARD PRIORITY OF THIS PROJECT NO. ____ ☐

SPECIFY PROVINCIAL PRIORITY NO. ____ ☐

FORM 236 A

SUMMARY OF PROJECTS ON FORM 1315-236 A & B

ESTIMATED COST & FUNDING FOR THE YEAR 19___

Name of Jurisdiction: ______________________ No. ________

Current Fixed Capacity: ☐

Current Enrolment Sept. 30.19___ ☐

Current U Factor 19___ ☐

Equity Factor: ☐

Number of New Projects: Construction ☐

Modernization ☐

Total: ☐

___________ 19___ (Date)

___________ (Signature of Secretary - Treasurer)

Local Priority Number	Prov. Priority Number	Description of Project	Area Proposed m^2	Area Approved m^2 dept. use	Fixed Capacity Change +/-	Est. Gov't Support $	Est. Local Support $	Est. Total Cost $
		Total:						

Board Resolution:
(Please Quote)

Form1315-236C Jan. 1984

STATEMENT OF FINAL COSTS

(For New Construction Projects Only)

NAME OF JURISDICTION ____________________

NAME OF PROJECT ____________________ PRIORITY NO. ______

DATE PROJECT COMPLETED ____________________ YEAR ______

BY-LAW NO. ____________________ BY-LAW AMOUNT $ ______

STATEMENT OF EXPENDITURES FOR THIS PROJECT:

Actual Cost of Construction (new construction or addition)	$
Less Federal Tax Rebate	$
Sub-total	$
Architect Fees	$
Land Purchase	$
Site Development	$
Equipment	$
Approved Vocational Equipment	$
Other * (please specify)	$
	$
	$
*(eg. Clerk of the Works, subsoil, etc.)	
TOTAL EXPENDITURES	$ **

STATEMENT OF REVENUE USED TO FUND THIS PROJECT:

Capital Reserves	$
Contributions from Current Operating Fund	$
Capital Agreements: Federal Government	$
Municipalities	$
Other	$
Insurance Recovery	$
Grants	$
Other (please specify)	$
Debentures Previously Issued	$
Total	$
Debenture Issue Requested (AMFC - Form B)	$
TOTAL REVENUE	$ **

** To Agree

DATE: ____________________ ____________________

Signature - Secretary Treasurer

NOTE: Submit this statement to School Buildings Services with a copy to School Business Administration Services, Alberta Education.

SCHOOL BUILDINGS BOARD

Statement of Eligible Costs

(New Construction)

School Building
Project In ____________________ Div./Cty. ________

________________ S.D. No. ________ Name ____________________

New ________ Addition ________ Other ____________________

Final Cost Amount $ ____________________

Less Federal Sales Tax @ ________% $ ____________________

Sub-total $ ____________________

Plus Professional Fees @ ________% $ ____________________

Total $ ____________________

Gross area provided ________ m^2 Cost per m^2 $ ____________________

Less ________ m^2 not recognized in respect to: ____________________

____

leaving ________ gross m^2 for approval.

PROVINCIAL GOVERNMENT ESTIMATED SUPPORT (New Construction)

E ________ P = E x U x A x S

U ________

A ________

S ________ $ ____________________

(Includes distance, if applicable)
Other factors, if applicable (e.g. Subsoil,
Clerk of the Works, etc.)

________________ $ ____________________

________________ $ ____________________

________________ $ ____________________

*Total Estimated Government Support $ ____________________

Estimated School Board Support $ ____________________

NOTE:

The amount of eligible debenture may be less than this amount, if there are other forms of support which are to be applied, such as insurance proceeds, capital funds from the sale of school property, excess debentures, contributions from the Government of Canada or others, etc. The Department of Education deals with these matters in conjunction with the issuing of debentures.

ITEM #________ Date ________________ ____________________

Coordinator and Secretary
School Buildings Board

Tender/Day Labor Scheme approved ________________

*Final financial support will be determined three years after date of tender approval.

March, 1985

SCHOOL BUILDINGS BOARD

FINAL STATEMENT OF ELIGIBLE COSTS

(as per 1979 Regulation 15(n))

SCHOOL BUILDING PROJECT IN ______________________ CTY/DIV ____________

______________________ S.D. NO. _____ NAME ______________________

NEW __________ ADDITION __________ OTHER ______________________

FINAL COST AMOUNT $ ______________

LESS FEDERAL SALES TAX @ _____ % $ ______________

SUB-TOTAL $ ______________

PLUS PROFESSIONAL FEES @ _____ % $ ______________

$ ______________

$ ______________

$ ______________

TOTAL $ ______________

GROSS M^2 PROVIDED __________ COST PER M^2 $ __________

LESS ____________ M^2 not recognized in respect to: __________

____

____

LEAVING ______________ M^2 FOR APPROVAL.

FINAL PROVINCIAL GOVERNMENT SUPPORT (new construction)

E __________

$$P = [\ 1 - 0.15(E)\ ] \times [\ \frac{U}{0.85}\ ] \times [\ M \times S\ ]$$

U __________

M __________

S __________ $ ______________

Includes distance and other
factors, if applicable

$ ______________ $ ______________

$ ______________ $ ______________

*TOTAL GOVERNMENT SUPPORT $ ______________

SCHOOL BOARD SUPPORT $ ______________

NOTE:

The amount of eligible debenture may be less than this amount, if there are other forms of support which are to be applied; such as, insurance proceeds, capital funds from the sale of school property, excess debentures, contributions from the Government of Canada or others, etc. The Department of Education deals with these matters in conjunction with the issuing of debentures.

ITEM # ____________ DATE ________________

____
Coordinator and Secretary
School Buildings Board

TENDER/DAY LABOUR SCHEME APPROVED ________________

*This supersedes the Estimated Statement of Eligible Costs dated ______________

SBBD Form NFP 3C-82 (Revised 1983.11.1)
(January 1, 1982)

MODERNIZATION FORMS

SCHOOL MODERNIZATION APPLICATION FORM

B

ESTIMATED COST AND FUNDING BY PROJECT
FOR THE YEAR 19__ DATE ______________

Name of Jurisdiction ______________ No. ______	
Name of District ______________ No. ______	______________ Signature of Secretary-Treasurer

	Past Enrolments (Sept. 30)					Projected Enrolments				
	19	19	19	19	19	19	19	19	19	19
Total Jurisdiction Enrolment										
% Change										
Project School Enrolment										

Name of Project ______________________________
Room or Area ______________ Age of Building ______________ Type of Constuction ______________
Project Description*:

Area (m^2) of this project	
Current capacity of school	
Capacity after Modernization	
Capacity change	

* Attach Statement of Program Development, School Facility Assessment Reports, small scale plans, description of proposed work, and cost estimates.
(For further information, refer to back of this form.)

A. ESTIMATED PROJECT COSTS

Architectural	$
Structural	$
Mechanical	$
Electrical	$
Code	$
Consultant's Fees	$
Other (specify) ______________	$
______________	
______________	
______________	
Total Estimated Project Costs	$

B. ESTIMATED FINANCING BY SOURCE

Estimated Maximum Provincial Support ($P = E \times U \times A \times \frac{S}{2}$)*

Equity Factor		
Utilization Factor		
Area (m^2)	m^2	
Support Level (new construction)	$ /m^2	
Distance Allowace	$ /m^2	
Other Allowance	$ /m^2	
Modernization Support $\left(\frac{\text{support level + allowances}}{2}\right)$	$ /m^2	
Total Estimated Max. Provincial Support	$ /m^2	$
Local Support		$
Other Support ______________		$
______________		
Total Estimated Project Support		$

Note: Total Estimated Costs (Section A) should equal Total Estimated Support (Section B.)

* If Total Estimated Cost is less than $A \times \frac{S}{2}$, use Total Estimated Cost in calculating the Provincial Support Estimate.

Name of School ______________	Specify School Board Priority of this Project No.	
Address ______________	Specify Provincial Priority No.	

FORM 236B

GENERAL INSTRUCTIONS

1. Application Form B, Summary Form C and related materials to be submitted in duplicate.
2. Outline of a School Modernization Program Submission.

   The following suggested outline will assist in developing a Modernization submission.

   A. Statement of Program Development
      1. Needs (Educational, Administrative, Community and Other Needs)
      2. Evaluation of Demographic Information
      3. Student numbers bussed to this school
      4. Inventory of this and other nearby building facilities

   B. Assessment of Facilities Selected for Modernization
      1. Evaluation reports on condition and adequacy of existing building structural, architectural, mechanical and electrical systems
      2. Recommended improvements to the above systems

   C. Submission of schematic plans, work description and cost estimates

3. Cost Estimate Format (for detailed project submission stage).

   The following general format may be used for estimating costs. Provide description and quantity for each work item.

		Cost Estimate
(a)	Architectural	
	1. Demolition	$
	2. Interior Upgrading	
	- floors	$
	- walls	$
	- ceilings	$
	- doors & windows	$
	- millwork	$
	- acoustics	$
	- redecorating	$
	Subtotal	$
	3. Exterior Upgrading	
	Subtotal	$
(b)	Structural	
	Subtotal	$

		Cost Estimate
(c)	Mechanical	
	1. Heating	$
	2. Ventilation	$
	3. Plumbing	$
	Subtotal	$
(d)	Electrical	
	1. Services and Distribution	
	2. Lighting	
	3. Outlets	
	4. Intercommunication	
	Subtotal	$
(e)	Code	
	Subtotal	$
(f)	Others (Specify)	
	Subtotal	$
	TOTAL	$

4. Preliminary estimate of provincial support for modernization projects.

   a. General Modernization $P = E \times U \times A \times \frac{S}{2}$

      where P is maximum provincial support
      E (Equity Factor) = (1-0.15e)
      U Utilization Factor = $\frac{u}{0.85}$

      A is maximum gross area of a school building project eligible for financial support
      S is the financial support per square metre

      Details are outlined in the School Buildings Regulation

   b. Modernization of existing school space in lieu of new construction

$$P = E \times U \times 1.10 \times A \times \frac{S}{2}$$

      provided that where $U \times 1.10$ exceeds one it shall be considered to be one

   c. Modernization of a small area for mandated program changes

$$P = E \times A \times \frac{S}{2}$$

      NOTE: If school board's estimated cost is less than $A \times \frac{S}{2}$, the estimated amount should be used in lieu of $A \times \frac{S}{2}$ in the above funding formula.

      It must also be noted that the above formulae may be used to arrive at a preliminary estimate of provincial support as long as it is understood that final financial support may be less than the preliminary estimate. This is because final provincial support shall be based on a supported cost which shall be limited to the lesser of:

      (i) one half of the current support for new construction ($A \times \frac{S}{2}$) or a maximum level established by the School Buildings Board (whichever is less), and
      (ii) the actual cost of the modernization project.

5. Should clarification be required in completing this form, please contact Mr. Hoang Le, Engineering Manager at 427-2973 (Edmonton).

SUMMARY OF PROJECTS ON FORM 1315-236 A & B

ESTIMATED COST & FUNDING FOR THE YEAR 19__

Name of Jurisdiction: ____________________ No. ________

Current Fixed Capacity: ☐ Current Enrolment Sept. 30.19__ ☐ Current U Factor 19__ ☐ Equity Factor: ☐

Number of New Projects: Construction ☐

Modernization ☐

Total: ☐

____________ 19__ ____________________

(Date) (Signature of Secretary - Treasurer)

Local Priority Number	Prov. Priority Number	Description of Project	Area Proposed m^2	Area Approved m^2 dept. use	Fixed Capacity Change +/-	Est. Gov't Support $	Est. Local Support $	Est. Total Cost $
		Total:						

Board Resolution:
(Please Quote)

Form 1315-236C Jan. 1984

STATEMENT OF FINAL COSTS

(MODERNIZATION PROJECT 19__)

JURISDICTION ____________________

SCHOOL NAME/LOCATION ____________________

PROJECT DESCRIPTION ____________________

COMPLETION DATE __________ PRIORITY NO. __________

SCHOOL BUILDINGS BOARD APPROVAL MINUTE NO. __________

By-law No. __________ By-law amount $__________

STATEMENT OF EXPENDITURES FOR THIS PROJECT

Actual cost of modernization project only	$
Professional fees	$
Other (specify)* ____________________ ____________________ ____________________	$
(*e.g. Clerk of the Works)	
TOTAL EXPENDITURES	$ **

STATEMENT OF REVENUE USED TO FUND THIS PROJECT

Capital Reserves		$
Contributions from Current Operating Fund		$
Capital Agreements:	Federal Government	$
	Municipalities	$
	Other	$
Insurance Recovery		$
Grants		$
Other (specify) ____________________ ____________________		$
Debentures previously issued		$
	TOTAL	$
Debenture Issue Requested (AMFC - Form B)		$
TOTAL REVENUE		$ **

**Totals must agree

DATE: ____________________

____
Signature - Secretary Treasurer

NOTE: This statement to be submitted to School Buildings Services upon project completion with a copy to School Business Administration Services.

FINAL INSPECTION REPORT FORM
(MODERNIZATION PROJECT 19__)
TO BE DONE IN CONJUNCTION WITH STATEMENT OF FINAL COSTS

PART 'A' Statement of Final Project Cost (To be completed by School Board)

SCHOOL JURISDICTION: ______________________________

SCHOOL: ______________________________

PROJECT DESCRIPTION: ______________________________

____

SCHOOL BUILDING BOARD MINUTE NUMBER(s): ____________ ____________

- Total Construction Cost of Project (Not including fees - attach cost break down)	$
- Less cost not related to the above minute number(s)	$
SUB TOTAL	$
- Plus Professional fees on government approved items	$
Total Cost of Government Approved Portion	$

I certify that to the best of my information and belief, the cost information used for the determination of government support payable by Alberta Education is correct.

______________________________ ____________

Signature of Secretary-Treasurer Date

PART 'B' Recognition of need (To be Completed by Alberta Education)

______ x ______ x ______m^2 x ______ = $______
Maximum Support Including Contingency and Fees

$______
Maximum Approved Construction Cost Including Contingency and Fees

PART 'C' Inspectors Evaluation

$______

$______

____________ ____________

Inspection By Date

Recommended Approved Construction Cost Including Contingency and Fees $______

SCHOOL BUILDINGS BOARD
FINAL STATEMENT OF ELIGIBLE COSTS
(MODERNIZATION PROJECT 19___)

JURISDICTION ____________________

SCHOOL NAME/LOCATION ____________________

PROJECT DESCRIPTION ____________________

COMPLETION DATE ____________ PRIORITY NO. ____________

SCHOOL BUILDINGS BOARD APPROVAL MINUTE NO. ____________

COSTS

Total construction cost of project $____________

Less costs not related to approval number(s) $____________

SUB TOTAL $____________

Plus professional fees on government approved items @ ______% $____________

Total cost of Government approved items $____________

Department supported cost (approval letter) $____________

Less costs of approved work not completed $____________

Final recommended approved project cost $____________

PROVINCIAL GOVERNMENT FINAL SUPPORT

P = E x U x Supported Cost*

Equity Factor ____________

Utilization Factor ____________

Approved Supported Costs ____________

(includes applicable distance allowance)

$____________

Other factors (if applicable)

e.g. Clerk of the Works ____________ $____________

____________ $____________

TOTAL GOVERNMENT SUPPORT $____________

SCHOOL BOARD SUPPORT $____________

NOTE: The amount of eligible debenture may be less than this amount if there are other forms of support which are to be applied, such as insurance proceeds, capital funds from the of sale of school property, excess debentures, contributions from the Government of Canada or other, etc. The Department of Education deals with these matters in conjunction with the issuing of debentures.

ITEM # ____________ Date ____________ ____________________

Coordinator and Secretary
School Buildings Board

Tender/Day Labour Scheme approved ____________

* Supported Cost as established by the School Buildings Board.

BQRP FORMS

BQRP

BQRP-A-86
Form C

C

APPLICATION FORM

Submit Application Forms and All Related Material in Duplicate. Please refer to Instructions on the Back of this page

PROGRAM YEAR 19____

SCHOOL JURISDICTION ______________________ NO.____________

SCHOOL NAME ______________________ LOCATION__________

Sch. Board Priority Number	BQRP Cate-gory	Proposal (Specific details required)	Age of * Construc-tion	Cost Estimate
			Total	

Secretary Treasurer ______________________ Date__________ 19____

* Age of that section of building in which the proposed project is being considered, or year that thi component last received funds under a similar BQRP.

Forward applications and all related material to: Program Co-ordinator School Buildings Services Branch.

Contact Person ______________________ Phone No.______________

INSTRUCTIONS

1. Applications to be submitted in metric. (School Board to provide all necessary measurements.)
2. Append in duplicate any details that may assist the School Buildings Board in fully understanding the proposal.
3. Sketch Plans of the entire school showing area involved must be attached.
4. Submissions under Category 1 (b) must be identified on an elevation of the area(s) involved.
5. Submissions under Category 4 must be documented by the pertinent Provincial Code Authority.
6. Complete cost estimate details to be appended to the application form.
7. Roof applications must be accompanied by a Roofing Consultant's (not roofer) Report.

NOTE: Submissions not completed in detail will be returned and reapplication may be made in the following year.

Enquiries about any of the programs may be directed to:

General - Fiore Berlin

Energy - Dave Cousins

Code - Trevor Gough

Construction Inspectors

William Belous

Jim Johnson

Trevor Gough

Ed Pardely

All the staff members listed may be contacted at 427-2973.

BQRP BQRP-S-86

YEARLY SUMMARY SHEET

Submit Summary Sheet and All Related Material in Duplicate. Please refer to Instructions on the Back of this page

PROGRAM YEAR 19____

SCHOOL JURISDICTION ______________________ NO.__________

SCHOOL BOARD USE (Complete All Columns)							Dept. Use Only	
School Name (List Alphabetically)	Identification of Project	Overall Local Priority	Provincial Priority	Estimated Government Support	Estimated Local Cost	Total	Meets Priority	Estimated Government Support*
Sub-totals for this sheet								
Total for Your Jurisdiction (last sheet)								

School Board Motion: (Please Quote)

Secretary-Treasurer ______________________ Date________19___

* For budget purposes only. Official recognition must be received from the School Buildings Board before commencing the project.

Contact Person ______________________ Phone No.______________

. Instructions for Completing Yearly Summary Sheet

This summary sheet will be reviewed by Branch personnel and returned with the columns "for Department use only" filled in. The School Board can then use this information for budget purposes.

It should be noted that official recognition of need must be received from the School Buildings Board before commencing work as projects that are identified as meeting the priority list may be eliminated for other reasons.

FORMULA FOR ESTIMATING THE LEVEL OF GOVERNMENT SUPPORT

$ ________		________		________		$ ________
School Board Estimate Including Consultants Fees	x	Age Factor When Applicable	x	Equity Factor	=	Maximum Support

Calculation of Age Factor

- The age of this section of building or the age this project last received BQRP support divided by the age factor as specified under the specific category. This figure will not exceed one.

Calculation of the Equity Factor (1 - 0.15e)

- District Equalized Assessment per Resident Pupil
- Provincial Equalized Assessment per Resident Pupil
- e (District assessment divided by Provincial assessment)
- Equity Factor = (1 - 0.15e)

The Equity Factor will not be less than .85 or more than .97.

Should clarification be required in completing this form, please contact Mr. Fiore Berlin, Program Coordinator at 427-2973 in Edmonton.

BUILDING QUALITY RESTORATION PROGRAM CLAIM FORM

B.Q.R.P. 1: 07-85

19__ RECOGNITION OF NEED

SCHOOL JURISDICTION·

____________________ No._________ NAME OF SCHOOL____________________________

Part A (To be completed by School Buildings Board)				Part B (To be completed by the Secretary-Treasurer) Refer to Instructions on Reverse Side					Part C (To be completed b an Alberta Education Constructio Inspector)	
Min. No.	Item & Cat.	Description	Maximum Recognition	Final Cost (A)	Vendor (B)	Invoice No. (C)	Amount of Invoice (D)	Amount Claimed (E)	Inspectors Comments	Maximum Approval
									Administration F (2)	$
AUTHORIZATION		TOTAL	$	I certify that to the best of my information and belief, the cost information used for the determination of the grant payable by Alberta Education is correct.				$	Inspection Report by: TOTAL	$

____
CO-ORDINATOR and SECRETARY
SCHOOL BUILDINGS BOARD
DATE ________________ 19__
DEPARTMENTAL USE ONLY

____
SIGNATURE OF SECRETARY-TREASURER

________________ 19__
DATE

____
INSPECTOR

____
PROGRAM CO-ORDINATOR
DATE 19__

CLAIM PROCEDURES

(1) Upon completion of the total project (all project items must be accounted for) fill out Part "B" as follows:

- (i) Column (A) Final Cost - List final costs for each project item (or sub-item) recognized. A combined cost will not be accepted. If the work will not be done indicate by marking cancelled.
- (ii) Column (B) Vendor - Provide the name of the vendor.
- (iii) Column (C) Invoice No. - Fill in the vendor's invoice number.
- (iv) Column (D) Amount of Invoice applicable to this item.
- (v) Column (E) Supported Amount Claimed - The lesser of:
  - (a) actual cost pro-rated by the formula, OR
  - (b) maximum recognition.

(2) Where an invoice reflects materials, supplies and labour purchases for other parts of this project, or for other projects, whether approved or not, the total invoice amount should be reconciled on an attachment.

(3) It is not necessary to submit receipts, cancelled cheques or invoices.

NOTE:

Alberta Education and Auditor General of Alberta reserve the right to review the financial records of the school board relative to this program.

Records should include:

- (a) invoices listed on the claim
- (b) schedules showing labor costs for board employed (full-time, part-time, or contract) who have worked on a project. The schedules should provide:
  - (i) the individual's name
  - (ii) hours worked on each project
  - (iii) hourly rate of pay
  - (iv) time sheets should support the schedule

  This schedule should be certified by the Secretary-Treasurer.
- (c) Statements giving costs of items used from stock (inventory) should be related to specific projects for which the materials were used. This schedule should be certified by the Secretary-Treasurer.

When Part "B" is completed, submit two copies of the statement to:

Fiore Berlin
Program Co-ordinator
School Buildings Services
Devonian Building, 9th Floor West
11160 Jasper Avenue
Edmonton, Alberta
T5K 0L2

School Buildings Services will submit this form to Grants Administration for processing.

INTERIM POLICY AND GUIDELINES:
USE OF VACANT SCHOOL SPACE

INTERIM POLICY AND GUIDELINES

SECTION **PAGE**

Use of Vacant School Space

Policy 1
Guidelines 1
Public Sector 1
Non-profit Sector 1
Private Sector 1
Use of Vacant School Space (Table) 3
Exemption of Space Leased to a Municipal Corporation 4
Guidelines for Constructing Instructional Areas In Community Facilities 5
Information Which may be Requested at the Discretion of the School Buildings Board 6
Disposal and Sale of Property Guidelines 7

ALBERTA EDUCATION

INTERIM POLICY AND GUIDELINES
USE OF VACANT SCHOOL SPACE
(SECTION 104 OF THE SCHOOL ACT)

Policy

Vacant school space should be directed toward uses intended for the general public whenever possible and feasible.

Guidelines

1. School boards will be encouraged to give priority to the leasing of space to the following order of use:

(a) Public Sector	- means any activity controlled or operated by a level(s) of government, including public and separate school boards.
(b) Non-profit Sector (including private schools for the handicapped (Category II) attended by school board-directed pupils)	- means any activity controlled or operated by any non-profit corporation, society or association, which is legally registered in Alberta, has a local community based membership and is exempt from paying tax under the Federal Income Tax Act. - includes early childhood services private operators. - excludes all religious organizations.
(c) Private Sector (including private schools)	- means any activity controlled or operated by any individual, corporation, group or organization, which does not come within the description of public sector uses or non-profit sector uses. - includes private schools as defined in the Department of Education Act, excepting private schools for the handicapped (Category II) attended by board-directed pupils. - includes all religious organizations.

2. All leased space will be "callable", at the school board's wish, to be used for educational purposes.

3. For space leased to the public sector and non-profit groups:

    (a) space exemptions will be granted and debt retirement grants will continue; and

    (b) lease charges will be at cost or a nominal fee.

4. For space leased to the private sector including private schools/religious organizations:

    (a) space exemptions will not be granted,

    (b) debt retirement grants will not continue, unless

        (1) the debenture support is less than $1,000 per year for the total area leased in a school; and/or

        (2) the age of the area being leased is greater than 15 years and the total amount of outstanding debenture for Building Quality Restoration Program (B.Q.R.P.) and modernization projects is less than $100,000.

    (c) school boards may charge whatever level is deemed appropriate and if a profit is made, they may keep the proceeds.

5. The final decision as to the use of vacant school space will remain the responsibility of local school jurisdictions.

6. Individuals or corporations entering into a lease agreement with a school jurisdiction will have legal status acceptable to Alberta Education.

7. All leases are subject to final approval by the Minister or his designate.

(NOTE: The Minister or his designate after approving a proposed lease pursuant to Section 104(2) of the School Act, will determine whether the proposed lease comes within the public sector, non-profit sector or private sector use description.)

USE OF VACANT SCHOOL SPACE

A Table Matching Type of Use of Vacant School Space with Provincial Policy on Space Exemptions, Debt Retirement Support and Rent/Lease Charges.

	USE	SPACE EXEMPTION GRANTED	DEBT RETIREMENT SUPPORT CONTINUED	RENT/LEASE CHARGES
1.	Public Sector	Yes	Yes	Cost or Nominal Fee
2.	Non-Profit Sector (Including E.C.S. Private Operators*)	Yes	Yes	Cost or Nominal Fee
3.	Private Sector (Including Private Schools and Religious Organizations)	No	No**	No Maximum or Minimum

* Includes private schools for the handicapped (Category II) attended by school board-directed pupils. For example, if half the students attending such a school are board-directed, space exemption and debt retirement support (should there be any outstanding) would be prorated at 50% accordingly.

** Or, as per guideline item 4(b).

EXEMPTION OF SPACE LEASED TO A MUNICIPAL CORPORATION

EXEMPTION OF SPACE LEASED TO A MUNICIPAL CORPORATION

Pursuant to Section 104 of the School Act and Section 3 of the School Buildings Regulation 1984, the School Buildings Board may approve a capacity exemption for all school space leased to a municipal corporation, subject to the conditions that:

1. municipal corporation subleases are acceptable to the school board,

2. the subleases are on a one-year renewable basis, so that the school board may recall the space if required for educational purposes,

3. the subleases meet Alberta Education space exemption policies and guidelines, (March 19, 1984 - Interim Policy and Guidelines - Use of Vacant Space); and

4. the municipal corporation charges only a nominal sublease fee.

GUIDELINES FOR CONSTRUCTING INSTRUCTIONAL AREAS IN COMMUNITY FACILITIES

GUIDELINES FOR CONSTRUCTING INSTRUCTIONAL AREAS IN COMMUNITY FACILITIES

The following guidelines are proposed as a basis for funding:

1. Where the jurisdiction demonstrates a need for the space that cannot be fulfilled by an existing school plant, special consideration may be made for supporting space constructed in a community facility.

2. There is a need for the educational program to be offered in the community.

3. The curriculum offered in the space is acceptable to the Curriculum Branch, Alberta Education.

4. The space is available for day time use by students.

5. A cost sharing and use agreement is made between the school board and community regarding the space in question.

6. Funding levels be proportional with educational use and be based on area guidelines and funding formula.

7. Application and approval procedures follow existing practice for other types of instructional space.

INFORMATION WHICH MAY BE REQUESTED AT THE DISCRETION OF THE SCHOOL BUILDINGS BOARD

INFORMATION WHICH MAY BE REQUESTED AT THE DISCRETION OF THE SCHOOL BUILDINGS BOARD

1. A statement of enrolment of pupils who are not resident in the school division, their place of residence, classification and copies of tuition agreements;
2. A report of the grades being served, classification, reclassification or modification of existing school facilities in the school division;
3. A report on the use and location of any existing portable classroom, portable section and self-contained portable school in the school division;
4. A report of all changes to total capacity affected by the school division;
5. A report of the operational capacity of the school division;
6. The total capacity and enrolment of any school building in another school division constructed in whole or in part for the use of pupils from the applicant school division;
7. A report of disposal, sale, lease, or other use of a school building or part of it, no longer used for instruction of pupils and the date of the approval of the disposal, sale, lease or other use if the approval of the Minister is required pursuant to section 102 of The School Act (Revised 1980);
8. A list of any proposed or actual closure, disposal or lease of a school building in the school division;
9. A report on the financial support or cost sharing to be undertaken other than by the division of the School Foundation Program Fund in respect of a school building project or part of it;
10. A statement of unexpended insurance recoveries to which section 124 of The School Act applies;
11. A list of money held to which section 124 of The School Act applies;
12. An overview of planning legislation and development activity affecting the school division;
13. Description of residential development
    - (a) detailed information as to growth in the designated area,
    - (b) planning details as to the number and types of dwelling units to be built, and
    - (c) staging and timing of past and future housing development in the new growth area;
14. Description of modernization project
    - (a) an analysis of the proposed work, including changes to capacity if any,
    - (b) an estimate of cost for each aspect of the proposed work,
    - (c) the reason for the modernization, and
    - (d) an analysis of the formula for government support for the modernization project;
15. Description of a school, or part of a school to be replaced
    - (a) the reason for the replacement,
    - (b) the total capacity and type of construction of the replacement,
    - (c) an estimate of size and cost, and
    - (d) an analysis of the formula for government support for the replacement project;

DISPOSAL AND SALE OF SCHOOL PROPERTY

GUIDELINES

DISPOSAL AND SALE OF SCHOOL PROPERTY GUIDELINES

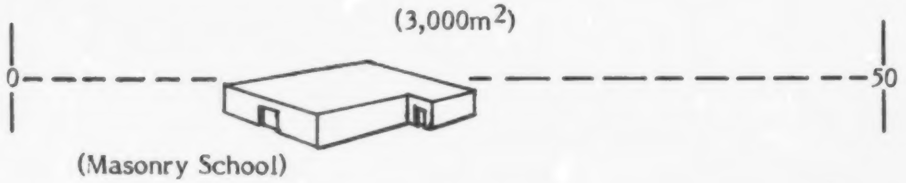
If a school jurisdiction has disposed of, or plans to dispose of a school building, financial support for the new school building project will be reduced by the School Buildings Board on a pro-rated basis, based on the disposed building's life expectancy.

Revenue from the disposal will be pro-rated against a future capital project, in lieu of new capital support. Section 124 of the School Act governs the pro-ration accruing to the school jurisdiction.

A school jurisdiction can obtain further information from its Field Administrative Officer, in the School Business Administration Branch.

The reduced financial support from a disposal or sale of a school building is illustrated in the hypothetical cases that follow:

(1) In cases of disposal (School Act, Section 104):



Disposal: 1984 + 1 year in which to replace.

1955 (Built) — 1985 (Disposal & Replacement) — 2005 (Theoretical life)

Support is given for the depreciated portion of a building, if replacement is approved by the Minister, only after the undepreciated portion of the building is replaced by new construction at local support. This sub-section quantifies the area to be built at local cost.

Following the hypothetical situation above:

(30 years - 3/5 Life)

1955 - - "Depreciated Portion" - - 1985

Support for this portion

(20 years - 2/5 life*)

1985--------------------------2055

"Undepreciated Portion"

To be replaced at local cost

*The formula A=(E - L)E x G defines the amount of space in the next new construction to be locally supported, on behalf of the "undepreciated portion."

"A" is the area for which financial support may not be approved, "E" is the life expectancy, "L" is the age of the building and "G" is the gross area.

A = 50 - 30/50 x 3,000 m^2

A = 20/50 x 3,000 m^2

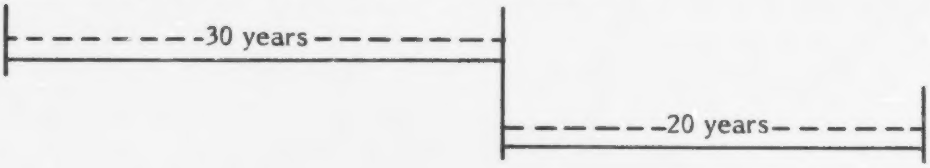
A = 1,200 m^2 (to be replaced at local cost)

Thereafter any approved area is supported including the 1,800 m^2 of depreciated area.

(2) Sale of Property

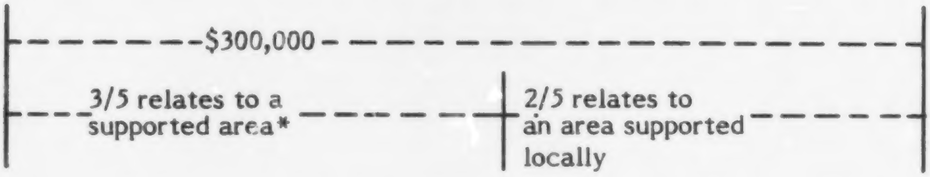
The supported portion of a sold school building will result in reduced support for new capital projects. This subsection quantifies the amount of such reduction.

Continuing with the same hypothetical situation:



3/5 has been, or will be, supported after 2/5 has been replaced locally.

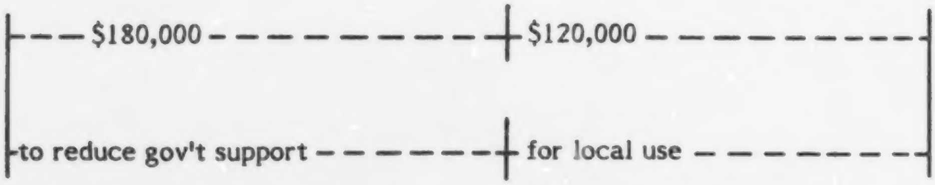
If the "old" building is sold for $300,000


$300,000
3/5 relates to a supported area*
2/5 relates to an area supported locally

*The formula R (Reduction) = L/E x P (Proceeds) defines that part of the proceeds of sale which will reduce governmental financial support.

R = L/E x P
= 30/50 x $300,000
= $180,000

Thus:



(No money is sent in; it is applied to new approved construction in the school jurisdiction.)

(For capital purposes to reduce unsupported debentures.)

N.B. The application of Section 124, The School Act, should be carefully noted:

Proceeds from the sale of land are not involved in these calculations, but are subject to provisions of Section 124, The School Act with regard to use of the proceeds of a sale.

Proceeds from the sale of a school building even though "local money" (as in the case above, $120,000), are subject to provisions of Section 124 of the School Act with regard to the use of these proceeds of sale.

Replacement After a Fire:

Pursuant to:

(a) The School Act, Section 72(3)(a)(ii), and
(b) Regulation 258/70 the School Insurance Regulations, Section 2,

it is up to the school board to carry insurance to put a school or a part of a school back into useable condition. Hence, if a fire occurs in a school, it is a matter for the school board to replace and/or repair the damage and the government is not financially involved. It is suggested that the school board contact its insurance agent immediately after the fire loss. The school board should also notify the School Building Services Branch as soon as a fire loss occurs.

The Government is involved in two aspects of replacement after fire is involved:

(a) The School Act, Section 106(3) requires that the approval of the Minister be obtained if the capacity of the school is to be reduced. The rebuilding and/or repair of the school after a fire to provide for a lower pupil capacity would involve this section.

(b) In a fire replacement situation, the School Buildings Board would establish an area based on the number of pupil places necessary to meet the needs of the utilization area in which the school is located. In brief, a statement of need would be submitted and an approval that is the equivalent of a recognition of need would be issued, after which an analysis of plans and a statement of eligible area would follow.

ENERGY CONSERVATION GUIDELINES
FOR NEW SCHOOLS

ENERGY CONSERVATION GUIDELINES FOR NEW SCHOOLS

SECTION **PAGE**

Energy Conserving Design Guidelines for New Schools

Introduction
Acknowledgments
Table of Contents
Energy Conserving Design Guidelines for New Schools

- Objectives and Energy Performance 1
- Design Suggestions 3
  - Building Envelope 3
  - Heating Systems 4
  - Ventilating Systems 5
  - Mechanical Cooling 5
  - Plumbing 6
  - Electrical Systems 6

Appendix No. 1 - Energy Use Analysis Input Parameters 8
Appendix No. 2 - Energy Performance Targets 9
Appendix No. 3 - Recommended Illuminances 9

ENERGY CONSERVING DESIGN GUIDELINES FOR NEW SCHOOLS

The addition or replacement of school facility space has been and will continue to be important in Alberta. Ensuring that this space is designed and operated with energy efficiency is of special concern.

Alberta Education has taken the initiative in researching the various aspects of energy conservation in buildings. As a result of initial studies, a publication called "Guidelines for Conserving Energy in Alberta Schools" was distributed to all school boards in 1978.

This publication covered measures and techniques for existing buildings as well as new buildings. To help boards make use of these guidelines, an in-house engineering group was formed to take part in a fifty-school pilot project.

Results of this two-year pilot project yielded valuable information on implementing energy conservation in an actual school setting. These updated guidelines for new schools were compiled from research on other design guidelines, experience of the in-house engineering group and feedback from a number of architects, engineers and others. With funding from Alberta Education, energy efficient schools such as Sweet Grass Elementary in Edmonton and Glenbow Elementary in Cochrane were designed and built. Many other recent designs have indicated a trend towards energy conserving techniques. Agencies such as the National Research Council are also involved in research on energy use in school facilities.

Some of the measures in these design guidelines may involve additional capital cost -- others may reduce construction costs. All measures are intended to reduce energy and operating costs through the life of the building. In this manner additional first costs would be recovered in lower operating costs within a reasonable time.

As some of the measures refer to specific types of equipment, it may be necessary to periodically update the guidelines to reflect 'state of the art' techniques.

This publication is intended to help school boards by making them more aware of the type of measures that constitute energy efficient design. It will provide a basis of discussion between the school board and the architect during the design stage of a project.

ACKNOWLEDGMENTS

The contribution of the following persons or agencies toward the development of these guidelines is greatly appreciated:

R. Becher, Bill Boucock Partnership
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TABLE OF CONTENTS

Introduction
Acknowledgments
Table of Contents

Page

Section A - Objectives and Energy Performance 1

1. General Objectives 1

2. Energy Performance 2

Section B - Design Suggestions 3

3. Building Envelope 3

4. Heating Systems 4

5. Ventilating Systems 5

6. Mechanical Cooling 5

7. Plumbing 6

8. Electrical Systems 6

Appendix No. 1 - Energy Use Analysis Input Parameters 8

Appendix No. 2 - Energy Performance Targets 9

Appendix No. 3 - Recommended Illuminances 9

ENERGY CONSERVING DESIGN GUIDELINES FOR NEW SCHOOLS

These design guidelines are separated into two major parts. The first deals with the intent of the guidelines, the concept of energy performance of a building, and general comments regarding effective energy conserving design. The second part deals with more specific design considerations on structural, mechanical and electrical systems in schools. The measures are suggestions only and should in no way be interpreted as measures that must be incorporated.

A. OBJECTIVES AND ENERGY PERFORMANCE

1. General Objectives

1.1 This publication is intended to establish a direction for designers and owners of school facilities in the province of Alberta. The facility should be designed to meet the following criteria:

A. Satisfy the functional requirements of the facility user,

B. Enable construction within the stipulated time frame,

C. Operate within the proposed energy performance levels, and

D. Provide the lowest life cycle cost (capital cost and operating cost) over the life of the building.

1.2 A multi-disciplinary approach involving designers and the owner should be practised from project initiation to completion of construction. The various components of the user group should ensure that their individual functional requirements are collectively satisfied. After completion of construction during the commissioning stage, the designers should educate the building operators about the operation and maintenance of the installed systems. A comprehensive and specific operating and maintenance manual and as-built drawings should be provided for building operators. In the first year warranty period, the school should be observed closely to verify that operational specifications are met. This procedure will minimize problems that often surface in the design, the construction and initial operation phases.

1.3 Members of the design team should perform a detailed analysis of the building functional requirements. The following are user requirements that have a great effect on energy consumption:

A. Space requirements of occupants and relationship between occupant functions,

B. Circulation or traffic flow,

C. Hours and type of occupancy, and

D. Energy requirements of specific functions.

1.4 Site selection and analysis also have an impact on the facility energy use. The following are specific considerations:

A. Climatic conditions,

B. Site characteristics such as topography, vegetation, zoning and traffic, and

C. Site services such as electrical power, fuel, water and sewage.

1.5 Analysis should be undertaken on the present and future cost and availability of utility services. Conservation measures and their relationship to policies, local conditions and available expertise should be studied.

1.6 On a building larger than 2,000 square metres, a computerized energy use simulation may be run during the conceptual stage of a project. This will aid in optimizing the selection of building systems and ensure the building will meet the proposed energy performance guideline. The lower operating costs resulting from an efficient facility would offset the additional cost of a computerized simulation.

2. Energy Performance

2.1 The intent of setting an energy performance target for a facility in the design stage is to ensure energy efficiency in the school's operation. Rather than prescribe a set of specific design concepts that must be adhered to, it is preferable to give the architect and engineers creative latitude to work towards this target. This performance figure can only be ascertained by running a computerized energy use simulation capable of modelling the various design parameters. Whatever simulation program is used, the designer should furnish documentation on all input variable assumptions, as well as output data on monthly projected energy use and an overall performance figure.

A specific list of input parameters that should be documented are shown in Appendix No. 1.

2.2 In addition to calculation of the design performance figure, the heating and cooling balance temperatures for the proposed building should be established. Heating balance temperature refers to the outdoor temperature at which heat generated by lights, people and equipment within a building is equal to the total heat loss of the building during the same period. Cooling balance temperature refers to the outdoor temperature at which the heat generated from all sources is equal to the free cooling capacity of the mechanical system.

2.3 A general energy performance standard of 900 megajoules per square metre per annum ($MJ/m^2 \cdot a$) was originally suggested by the federal government. The National Research Council has produced a more rigorous set of energy performance targets that are specifically for school buildings. They are broken down by school size, local heating degree days and typical hourly usage. A simplified table based on this source is shown in Appendix No. 2.

B. DESIGN SUGGESTIONS

The following measures are suggestions only and their applicability depends on the particular situation. They are not prescriptive guidelines.

3. Building Envelope

3.1 The shape of the building should be as compact as possible to minimize surface area.

3.2 The building should be oriented to optimize the use of passive solar energy. Consider the use of trees to act as windbreaks or shading devices.

3.3 The air/vapour barrier should be as continuous and unbroken as possible to minimize air infiltration.

3.4 All construction joints prone to air leakage should be caulked, gasketed or sealed.

3.5 Insulation levels should be economically evaluated as part of the energy use simulation procedure. The following thermal resistance values of various components are suggestions that may aid in achieving energy performance targets:

A.	Wall assemblies above grade level	RSI 3.0 (R-17)
B.	Wall assemblies below grade	RSI 1.6 (R-9)
C.	Roof construction	RSI 3.0 (R-17)
D.	Roof construction (attic type)	RSI 5.5 (R-31)
E.	Floor assembly	RSI 3.0 (R-17)
F.	Floor assembly (frame construction)	RSI 4.7 (R-26)
G.	Perimeters of slab floors	RSI 1.6 (R-9)

3.6 Vestibule door assemblies should be placed at all normal building entrances to minimize air infiltration and cold air dumping. Hardware that allows interior and exterior vestibule doors to remain open should not be used.

3.7 Thermal bridges in exterior wall assembly and window frames should be used as little as possible. Minimize building openings consistent with functional, code and safety requirements.

3.8 Glazing on exterior walls should have a minimum thermal resistance of RSI .36 (R-3.4). Double-glazed sealed units with minimum 13 millimetre spacing are recommended.

3.9 The area and orientation of glazing should take advantage of passive solar energy and natural lighting as indicated by the energy use analysis.

3.10 Window construction should be based on standards of minimum air leakage. Windows that open should be avoided if possible.

3.11 Unglazed doors on exterior walls should have a minimum thermal resistance of RSI .7 (R-4) and use vandal-proof high-quality weatherstripping.

3.12 An infrared scan may be included in the specifications and be performed in the warranty period to ensure the integrity of the building envelope.

4. Heating Systems

4.1 From an efficiency standpoint, centralized hot water heating with perimeter radiation is preferable to forced air heating. A separate heating and ventilating system should be provided for the gymnasium.

4.2 If boilers are used, at least two units should be provided for reliable hot water heating. Boiler operation should be staged, using multi-level firing or lead-lag control to match output to heating requirements. Boiler supply temperature reset should be used in conjunction with an outdoor air sensor, preferably with a 3-way mixing valve arrangement.

4.3 A minimum of two hot water circulation pumps should be provided and connected in parallel, each sized at 50 per cent of the total heat flow capacity. If it is feasible, pumps should be controlled to shut off above a specific outdoor temperature.

4.4 Heating systems should be selected to have the highest possible seasonal efficiency. Flue gas analysis should be done during the commissioning stage to verify maximum efficiency of combustion. Electronic ignition should be used on burners whenever possible.

4.5 Space temperatures should be set at 20°C. during occupied periods. A setting of 16 to 18°C. is recommended in gymnasiums. If mechanical cooling is required, space temperatures in the cooling mode should be 24 to 26°C. Vestibule areas should be maintained at 10°C. during the heating season.

4.6 Heating systems should be controlled to revert to a setback temperature during unoccupied periods. Start and stop time optimizing devices should be used to control the operation of heating equipment before and after occupancy. Provisions should be made for timed manual override in areas used for extended hours.

4.7 Heat recovery systems should be considered where a life cycle costing analysis justifies their use.

4.8 Duct work, piping and heating equipment should be insulated. Insulation on cold air supply ducts should have vapour barrier protection to prevent condensation within the insulation.

4.9 Location of sensors for temperature and ventilation control should reflect occupancy and heating load requirements. Each classroom should have its own thermostat.

5. Ventilating Systems

5.1 Minimum fresh air requirements for recirculating fan systems should be set at no more than 2.36 litres per second (5 cubic feet per minute) per person. This ventilation rate should be increased to meet code requirements or when process loads dictate that additional air be exhausted.

5.2 The ventilation system should be capable of introducing 100 per cent outdoor air when cooling air is required, and the temperature of the outdoor air is less than that of the return air. Morning warm up or cool down cycles should be incorporated in the ventilation design.

5.3 Ventilation and exhaust systems should be controlled to turn off automatically during unoccupied periods, either by clock timer or energy management system control. Consider the use of local timed override controls for gymnasiums and other areas.

5.4 Humidification should preferably be done using steam humidifiers. If mechanical cooling is used, dehumidification to less than 60 per cent relative humidity should not be done during the cooling cycle.

5.5 All exhaust ducts except combustion air should have a power-assisted damper near the exterior wall which closes when the system is not in operation.

5.6 Low leakage dampers, horizontally-pivoted and weatherstripped, should be used.

5.7 Variable air volume systems should be considered as a possible ventilation system. Centralized ventilation systems with hot water coils are preferable to other types.

5.8 If reheat systems that serve more than one controlled zone must be used, it should be possible to reset the mixed air supply to the highest temperature that will satisfy the zone requiring the coolest air.

6. Mechanical Cooling

6.1 If mechanical cooling must be incorporated, consider the use of water source heat pumps. An energy management system should be used for load matching and demand control.

6.2 Where a thermostat controls both heating and cooling, the operation of equipment should be sequenced by using a minimum 2.5°C. deadband between heating and cooling setpoints.

6.3 Controls for heating and cooling systems should be interlocked so that heating and cooling equipment cannot operate simultaneously.

7. Plumbing

7.1 Storage tanks for domestic water heaters should have an hourly standby heat loss that is as small as economically practical.

7.2 Domestic hot water heaters should supply water through insulated pipes at 40°C. with maximum possible overall efficiency. Electronic ignition on gas burners should be used. Where special processes require greater than 40°C. water, use local gas-fired boosters to raise the temperature at the point of use.

7.3 Domestic hot water recirculating pumps should be controlled to operate only during occupied hours.

7.4 Showers should use time and flow control devices that limit total flow to a maximum of .2 litres per second (2.5 gallons per minute) per outlet. Faucets should use time and flow control devices that limit flow rate to .04 litres per second (.5 gallons per minute).

7.5 If automatic urinal flushing systems must be used, flushing should be deactivated during unoccupied periods. During occupied periods, the flushing cycle should not be less than 10 minutes.

8. Electrical Systems

8.1 Secondary electrical voltages should be 3-phase, 4-wire at the highest practical voltage to minimize dissipation losses in distribution wiring. Electrical motors should be sized as closely to the actual load requirement as possible. Use of high efficiency motors should be considered.

8.2 Parking lot receptacles should be controlled to allow either timed cycling and/or loadshedding. A temperature override should cut off power above -10°C. and cycling should be done on minimum 15-minute intervals. Two parking stalls should be served by one 15-amp circuit breaker.

8.3 Connected lighting power should not exceed 20 watts per square metre in task areas (classrooms, office, library). Lighting should be designed to minimize glare and optimize visibility. Task lighting should be used wherever practical. Recommended maintained lighting levels are based on the Government of Ontario Ministry of Education lighting guidelines and are listed in Appendix No. 3.

8.4 Take full advantage of natural lighting sources and consider automatic or manual switching to turn off artificial lighting when natural illumination is sufficient. Provide local and centralized low-voltage switching control for each individual area.

8.5 Use energy-efficient fluorescent lamps and fixtures with high power factor ballasts. Minimize the application of incandescent fixtures and use reflector-type incandescent lamps. Consider the use of light colours for walls, floors and ceilings where practical.

8.6 Consider the use of high-pressure sodium and/or metal halide lighting (with keyed switch control) in gymnasiums. Instant-on lighting should be provided by fluorescent lamps.

8.7 Consider metal halide or high-pressure sodium fixtures for exterior site lighting, with control by photocell and timer.

8.8 Computerized load shedding and time of day control should be incorporated on electric loads to minimize peak electric demand requirement and consumption.

8.9 Space heating and hot water heating should not use electric power.

APPENDIX NO. 1 - ENERGY USE ANALYSIS INPUT PARAMETERS

The value of conducting an energy use analysis during the design stage of a building is evident. Rather than trying to standardize on the particular computer program used for an analysis, it is preferable to allow various programs to be used. If the input assumptions and output information are well documented, results of various analyses can be effectively compared. As part of the modelling process to simulate the energy use of a proposed building configuration, the following input parameters should be documented:

- shape, orientation and space utilization
- size, type and position of windows, doors, walls, floor and roof
- infiltration through the building envelope and heating/ventilating equipment
- locations of heat gain and heat loss
- use of natural lighting
- useable and unuseable solar gain
- thermal storage in the building mass or mechanical systems
- natural and mechanical ventilation
- transient effect of lighting, people and equipment
- energy transferring mechanisms and heat recovery
- free cooling with outdoor air
- method of weather data calculation
- hours of normal occupancy and cleaning schedule

APPENDIX NO. 2 - ENERGY PERFORMANCE TARGETS

Degree Days ($^{\circ}$F)	9,000	10,000	11,000	12,000
Degree Days ($^{\circ}$C)	5,000	5,500	6,100	6,600

Size (m^2)	Energy performance in MJ/m^2.annum			
3,000	700	750	800	850
5,000	650	700	750	800
10,000	600	600	650	700

Note: Applicable to schools with 1600 hours annual use and a relatively compact layout.

- based on a research report by J. K. Latta, National Research Council Division of Building Research, June 1981

APPENDIX NO. 3 - RECOMMENDED ILLUMINANCES

Classrooms	500 lux
Drafting and graphics rooms	500 lux
Laboratories	500 lux
Library reading	500 lux
Offices	500 lux
Shop areas	500 lux
Typing rooms	500 lux
Auditorium	250 lux
Cafeteria	250 lux
Gymnasium	250 lux
Library stacks	250 lux
Washrooms	250 lux
Corridors	250 lux
Mechanical rooms	250 lux
Storage areas	100 lux

- based on the report "Lighting for Education," Ontario Ministry of Education, 1981

INDEX

INDEX

Section Page

Application Forms
  Building Quality Restoration Program — School Buildings Regulation — 7
  Modernization — School Buildings Regulation — 5
  New Construction — School Buildings Regulation — 4

Approved Area Factor (Capital Plan) — School Capital Plan — 4

Area (Definition) — School Capital Funding Order — 1

Building Quality Restoration Program (BQRP)
  Administrative Procedures — Administrative Procedures — 6
  Application Forms — School Buildings Regulation — 7
  Capital Plan — School Capital Plan — 10
    Control Procedures — 10
    Criteria — 10
    Funding Formula — 10
    Priorities — 10
    Forms — Forms — 12-17
  Formula (Regular) — School Capital Funding Order — 5
  Guidelines — BQRP Guidelines
    Application for BQRP Advances — 30
    Application Form — 24
    Application Procedures — 25
    Categories of Projects — 8
    Distance (By Air) Allowances — 28
    Duration of Program — 1
    Financing — 5
    Five-Year Program 1984 - 88 — 29
    Guiding Principles — 2
    Instructions for Completing Yearly Summary Sheet — 27
    Introduction — 1
    Objectives — 2
    Procedure — 3
    Yearly Summary Sheet — 26

Business Education Equipment Component Formula — School Capital Funding Order — 5

Capacity (Definitions)
  Funding Order — School Capital Funding Order
    Operational — 1
    Total — 1
  School Buildings Regulation 1984 — School Buildings Regulation
    Fixed — 2
    Operational — 1
    Total — 1

Section — Page

Capacity Exemptions — Capacity Exemptions
  English as a Second Language . . . 1
  Guidelines for Adjustments for Students Withdrawn From a Jurisdiction . . . 1
  Leases . . . 1
  Special Education Classrooms . . . 1

Capacity, Fixed and Areas — School Buildings Regulation
  Expandable-Contractible Schools, Core Section:
    Elementary . . . 13
    Junior High . . . 12
    Senior High . . . 12
  Expandable-Contractible Schools, Portable Section . . . 14
  Permanent-Type Construction:
    Elementary . . . 11
    Junior High . . . 10
    Senior High . . . 9
  Self-contained Portable Schools . . . 14

Capital Plan — School Capital Plan
  Background . . . 1
  Building Quality Restoration Program 1984 - 88 . . . 10
    Control Procedures . . . 10
    Criteria . . . 10
    Funding Formula . . . 10
    Priorities . . . 10
  Funding Plan 1979 - 83 . . . 3
    Approved Area Factor (A) . . . 4
    Equity Factor (E) . . . 3
    Funding Formula . . . 3
    Jurisdictional Profile of Capacities, Exemptions and Enrolments . . . 5
    Support Factor (S) . . . 6
    Utilization Factor (U) . . . 3
  Funding Plan 1984 - 88
    Criteria . . . 6
    Funding Formula Adjustments . . . 8
    Modernization . . . 8
    Priority System . . . 8
    Total School Construction Inventory . . . 7
  Trends in Enrolments and School Construction . . . 2

Depreciation Ratio (D) . . . School Capital Funding Order . . . 3

Disposal and Sale of School Property Guidelines . . . Interim Policy & Guidelines . . . 7

Energy Conserving Design Guidelines for New Schools . . . Energy Conservation Guidelines . . . 1

	Section	Page
English as a Second Language (Capacity Exemptions)	Capacity Exemptions	1
Enrolments, Trends (Capital Plan)	School Capital Plan	2
Equity Factor, Definitions		
Capital Plan	School Capital Plan	3
Funding Order	School Capital Funding Order	1
Expandable-Contractible Schools, Core Section (Fixed Capacity and Areas)	School Buildings Regulation	12
Expandable-Contractible Schools, Portable Section (Fixed Capacity and Areas)	School Buildings Regulation	14
Facility Area Guidelines	Facility Area Guidelines	
Instructional Areas		2
Non-instructional Areas		7
School Categories		1
Funding Formula (Capital Plan)	School Capital Plan	3
Funding Order (Definitions)	School Capital Funding Order	
Area (A)		1
Building Quality Restoration Program Formula		
Business Education Equipment Component		5
Regular BQRP		5
Depreciation Ratio (D)		3
Equity Factor (E)		1
Instructional Area		1
Operational Capacity		1
Provincial Average Equalized Assessment Per Pupil		2
Provincial Support (P)		1
School Building Project		2
Support Per Square Metre (S)		2
Total Capacity		3
Utilization Factor (U)		3
Utilization Ratio (u)		2
Vocational Education Equipment Formula		5
Instructional Area (Definition)	School Capital Funding Order	1
Instructional Areas (Facility Area Guidelines)	Facility Area Guidelines	2
Instructional Areas (Guidelines for Constructing in Community Facilities)	Interim Policy & Guidelines	5
Leases (Capacity Exemptions)	Interim Policy & Guidelines	4

	Section	Page
Modernization		
Administrative Procedures	Administrative Procedures	1
Application Form	School Buildings Regulation	5
Capital Funding Plan (1984 - 88)	School Capital Plan	9
Forms	Forms	6-11
New School Construction		
Administrative Procedures	Administrative Procedures	1
Application Form	School Buildings Regulation	4
Forms	Forms	1-5
Non-instructional Areas (Facility Area Guidelines)	Facility Area Guidelines	7
Permanent-Type Construction (Fixed Capacity and Areas)	School Buildings Regulation	9
Portable Schools, Self-contained (Fixed Capacity and Areas)	School Buildings Regulation	14
Procedures, Administrative	Administrative Procedures	
Building Quality Restoration Program		6
Modernization		1
New School Construction		1
Provincial Average Equalized Assessment Per Pupil	School Capital Funding Order	2
Provincial Support (P) Formulas	School Capital Funding Order	1
School Board (Definition)	School Buildings Regulation	1
School Building Project (Definition)	School Buildings Regulation	1
School Buildings Board	School Buildings Services	
Authority	School Buildings Services	4
Composition	School Buildings Services	4
Information Which May Be Requested	Interim Policy&Guidelines	6
Meetings	School Buildings Services	4
Services	School Buildings Services	4
School Buildings Regulation 1984 (Definitions)	School Buildings Regulation	
Fixed Capacity		2
Instructional Area		1
Operational Capacity		1
School Board		1
School Building Project		1
Total Capacity		1

	Section	Page
School Buildings Services Branch	School Buildings Services	
Personnel		1
Purposes		2
Responsibilities and Services		2
Consultative, Advisory and Support Services		2
Field Work		3
Regulatory		2
Resource Personnel		3
School Buildings Board		4
Special Programs		3
Surveys		3
Space, Exemption Leased to a Municipal Corporation	Interim Policy & Guidelines	4
Space, Vacant	Interim Policy & Guidelines	1
Special Education Classrooms (Capacity Exemptions)	Capacity Exemptions	1
Support Factor (Capital Plan)	School Capital Plan	6
Support (Maximum) of Construction	School Capital Funding Order	
Schedule A (January 1, 1984 to December 31, 1984)		6
Schedule B (January 1, 1985 to June 30, 1985)		9
Support Per Square Metre (S) (Funding Order)	School Capital Funding Order	2
Tendering Regulation	Tendering Regulation	
Another Scheme Approved		1
Approval		2
Definitions		1
Limitations to Management and Proposed Schemes		6
Modified Tendering Procedures		3
Procurement by Public Tender		1
Requirements in a Contract		5
Requirements with a Contract		5
Tendering Procedures		3
Withdrawal		2
Utilization Factor (U)		
Capital Plan	School Capital Plan	3
Funding Order	School Capital Funding Order	1
Utilization Ratio (u) (Funding Order)	School Capital Funding Order	2
Vacant Space	Interim Policy & Guidelines	1
Vocational Education Equipment Formula (Funding Order)	School Capital Funding Order	5